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An Analysis of the Origins of the COVID-19 Pandemic

Interim Report

Senate Committee on Health Education, Labor and Pensions

Minority Oversight Staff

October 2022

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Foreword

Over one million Americans have died from COVID-19 and tens of millions have died from this virus worldwide. In addition to the tragic loss of life, over the past three years we have experienced the social, educational, and economic costs of a global pandemic.

Last summer, Chair Murray and I announced a bipartisan Health, Education, Labor and Pensions (HELP) Committee oversight effort into the origins of SARS-CoV-2, the virus that caused the COVID-19 pandemic as part of our effort to address pandemic preparedness and response programs, and we continue to work together on that project.

This is an interim report produced by HELP Committee Minority oversight staff. The objective was to review publicly available, open-source information to examine the two prevailing theories of origin of the SARS-CoV-2 virus: a natural zoonotic outbreak or a research-related incident. This Senate Health, Education, Labor, and Pensions (HELP) Committee Minority oversight staff report is the product of that review.

Over the last fifteen months, HELP Committee Minority oversight staff carefully reviewed several hundred publicly available scientific studies, interviewed several dozen subject matter experts, and analyzed previous reports and studies on the possible origins of the virus. I believe that this report provides a significant contribution to the existing body of evidence and helps establish parameters for how future analyses should be reviewed.

The lack of transparency and collaboration from government and public health officials in the People's Republic of China with respect to the origins of SARS-CoV-2 prevents reaching a more definitive conclusion.

With COVID-19 still in our midst, it is critical that we continue international efforts to uncover additional information regarding the origins of this deadly virus. I hope this report will guide the World Health Organization and other international institutions and researchers as they proceed with planned work to continue investigating the origins of this virus. Uncovering the answers to this critical question is imperative to our national and international ability to ensure that a pandemic of this size and scope does not happen again.

My ultimate goal with this report is to provide a clearer picture of what we know, so far, about the origins of SARS-CoV-2 so that we can continue to work together to be better prepared to respond to future public health threats. I believe this interim report does just that.

Richard Burr
United States Senator
Ranking Member, U.S. Senate Committee on Health, Education, Labor, and Pensions

Introduction

Three years after its emergence in Wuhan, exactly how SARS-CoV-2 first emerged as a respiratory pathogen capable of sustained human-to-human transmission remains the subject of active debate.[1] Experts have put forward two dominant theories on the origins of the virus.[2] The first theory is that SARS-CoV-2 is the result of a natural zoonotic spillover.[3] The second theory is that the virus infected humans as a consequence of a research-related incident.[4]

Understanding the virus's origin is essential to understanding how this outbreak happened, why detection and reporting systems did not work as anticipated, and to better prepare for future health threats. This report has reviewed open source, publicly available information relevant to the origins of the virus to consolidate additional information that can be contributed to the body of work investigating the answer to this question.

Establishing a clear picture of the likely origin of the virus has proven challenging. Since January 3, 2020, government officials in the People's Republic of China (PRC) have prohibited sharing or publishing any information on SARS-CoV-2 without state review and approval.[5] Restrictions on SARS-CoV-2 information remain in place today and, therefore, any information on SARS-CoV-2 and the COVID-19 pandemic published by government officials and scientists in China must be reviewed with these restrictions in mind.

As a result, establishing an approximate timeline for when SARS-CoV-2 first infected humans is difficult. Government officials and public health authorities in the PRC have claimed that there were no SARS-CoV-2 cases before early December 2019.[6] However, available epidemiologic evidence strongly suggests that SARS-CoV-2 began infecting humans in Wuhan or the surrounding area between mid-October and early to mid-November 2019.[7]

While precedent of previous outbreaks of human infections from contact with animals favors the hypothesis that a natural zoonotic spillover is responsible for the origin of SARS-CoV-2, the emergence of SARS-CoV-2 that resulted in the COVID-19 pandemic was most likely the result of a research-related incident. This conclusion is not intended to be dispositive. The lack of transparency from government and public health officials in the PRC with respect to the origins of SARS-CoV-2 prevents reaching a more definitive conclusion. Should additional information be made publicly available, and subject to independent verification, it is possible that these conclusions would be subject to review and reconsideration.

Section I
Analysis of Natural Zoonotic Origins Hypothesis

Zoonotic spillovers, in which animal diseases cross the species barrier and infect humans, are a well-known, well-documented natural phenomena.[8] By some estimations, natural zoonotic spillovers are responsible for 60 to 75 percent of emerging diseases in humans.[9] Coronaviruses, to which SARS-CoV-2 belongs, are a large family of viruses that cause disease in a variety of domestic and farmed animals and have been responsible for previous outbreaks of new diseases in humans.[10] All coronaviruses known to infect humans are the result of natural zoonotic spillover from animals into humans.[11]

Two recent and prominent examples include Severe Acute Respiratory Syndrome ("SARS") and Middle East Respiratory Syndrome ("MERS"), both of which are caused by a coronavirus ("SARS-CoV" and "MERS-CoV" respectively) leading to severe respiratory disease in humans.[12] Moreover, recent infectious disease pandemics, with the exception of the 1977 Russian Flu pandemic, are believed to have natural zoonotic origins.[13]

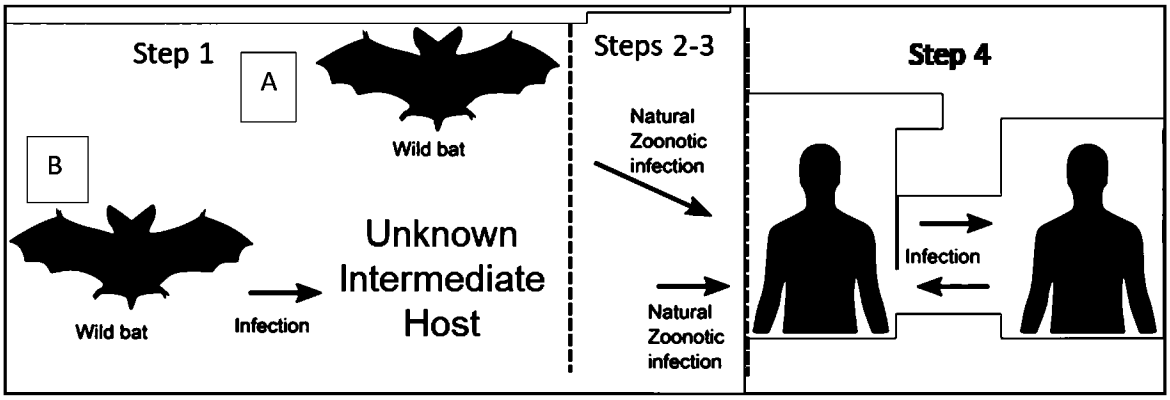
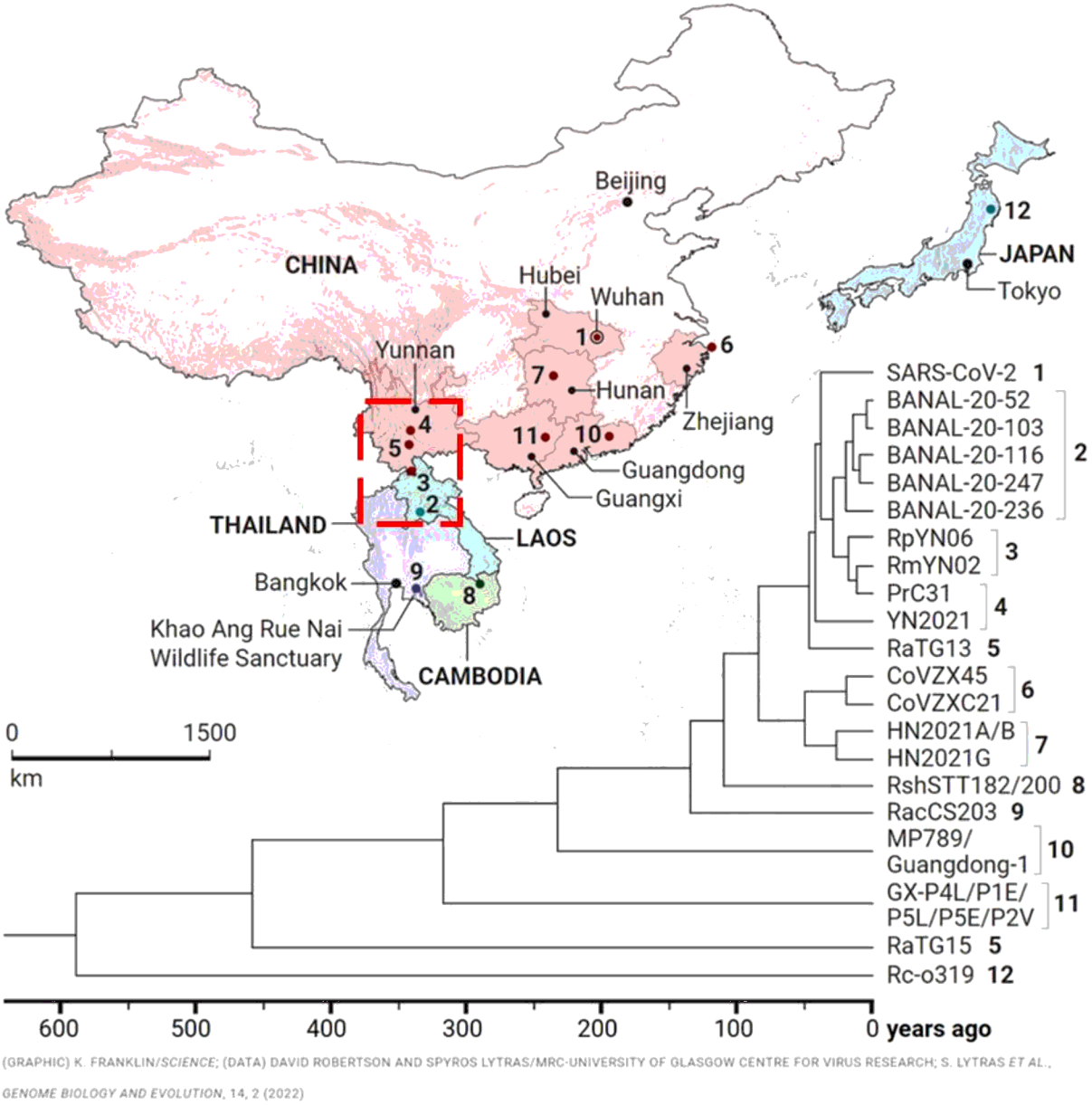


Figure 1: Example of a zoonotic spillover from bats. A: Direct spillover from bat to humans followed by human-to-human transmission. B: Spillover from a bat to an unknown intermediate host and then to humans, followed by human-to-human transmission.[14]

Natural zoonotic spillovers are a sequential process.[15] In this process, an animal virus must evolve in order to become a human-adapted virus. First, a virus infects animals. Second, those infected animals come into contact with humans (known as the human-animal interface). Third, the virus is able to infect humans. Fourth, the virus is able to adapt to efficiently transmit between humans.[16] Thus, a spillover event, in which disease is spread from animal to human, can result in one of two outcomes—either the pathogen, once transmitted from animals, is then transmitted from humans to humans, or the pathogen does not spread, resulting in a "dead-end" spillover. In many respects, once human-to-human transmission of SARS-CoV-2 was established, the onward human-to-human transmission of the virus would look similar regardless of whether it originated from a natural zoonotic spillover or a research-related incident.[17]

The natural zoonotic spillover hypothesis is a plausible explanation for how the COVID-19 pandemic started. There are a number of anomalies in the SARS-CoV-2 outbreak and the early COVID-19 pandemic compared to the emergence of past natural zoonotic spillovers, most notably the 2002-2004 SARS epidemic.



(GRAPHIC) K. FRANKLIN/*SCIENCE*; (DATA) DAVID ROBERTSON AND SPYROS LYTRAS/MRC-UNIVERSITY OF GLASGOW CENTRE FOR VIRUS RESEARCH; S. LYTRAS *ET AL.*, *GENOME BIOLOGY AND EVOLUTION*, 14, 2 (2022)

Figure 2: Map showing location of known SARS-related viruses most closely related to SARS-CoV-2 with five most closely related SARS-related coronaviruses to SARS-CoV-2 within the red box.[18]

Based on the precedent of past natural zoonotic spillovers, if SARS-CoV-2 is the result of a zoonotic spillover, it likely needed to circulate in an intermediate host to increase the virus' chances of being able to infect and replicate in humans.[19] Adaptation during circulation in an intermediate host is believed to have played a critical role in the emergence of SARS and MERS, as well as other bat viruses, such as hendra.[20] The identity of SARS-CoV-2's intermediate animal species remains unknown.[21] If such an intermediate animal species exists, where these intermediate species came into contact with and first infected humans is also unknown.[22] While it is likely that SARS-CoV-2 originated from a bat virus, most likely one found in horseshoe bats residing in Southern China or Southeast Asia, it remains unknown how SARS-CoV-2 traveled more than 1,000 miles from Southern China or Southeast Asia before emerging in Wuhan.[23] Almost three years after the COVID-19 pandemic began there is still no evidence of an animal

infected with SARS-CoV-2, or a closely related virus, before the first publicly reported human COVID-19 cases in Wuhan in December 2019.[24]

a. Epidemiology of SARS-CoV-2 Outbreak Differs from Previous Natural Zoonotic Spillovers

Most recent natural zoonotic spillovers of respiratory viruses with pandemic potential have left behind evidence of where and how they occurred.[25] Failed inter-species transmissions, or "dead-end" spillovers, typically leave behind serological evidence in the form of antibodies in humans and animals that were exposed and infected but did not effectively transmit the virus to others.[26] Failed transmissions also typically leave behind genetic evidence at the animal-human interface.[27]

Like interspecies transmission, human-to-human transmission also leave behind epidemiological evidence. The SARS epidemic saw at least five independent spillovers of the SARS virus into humans that then spread the virus to other humans, with other spillovers likely going unidentified and failing to cause sustained chains of transmission.[28] These spillovers occurred across multiple geographically distant live animal markets in Guangdong Province, China over a period of several months in 2002-2003.[29] Late-2003 to 2004 also saw isolated outbreaks of human SARS cases caused by additional independent spillovers of the virus.[30] Within six months of the start of the 2002-2004 SARS epidemic, intermediate host animal species candidates were identified, and numerous animals infected with SARS were found soon after the outbreak was identified.[31] In addition, early SARS virus samples retrieved from infected humans contained genetic mutations that reflected its period of circulation and adaptation in palm civets, the intermediate species.[32]

SARS-CoV-2's emergence also contrasts with outbreaks of human cases of Avian Influenza H7N9 in 2013. Like the 2002-2004 SARS outbreak, H7N9 started with multiple independent introductions of the virus into humans across multiple locations, even though the total number of human infections numbered less than 500.[33] Geographically disparate, independent spillovers imply that H7N9 Avian Influenza had circulated in bird populations for some time and across several provinces in China before the first known human infections. This is in contrast to the lack of geographically disparate cases of early COVID-19 cases in Hubei or China.[34]

The occurrence of natural zoonotic spillovers is also determined in part by probability. The frequency with which humans are exposed to an intermediate animal species infected with a zoonotic viral agent "is likely to be an important determinant in disease emergence."[35] This makes poorly regulated live animal markets in China and Southeast Asia effective conduits of zoonotic diseases.[36] The crowded conditions at these live animal markets mean that different members of multiple animal species that ordinarily would not come into contact are placed in close proximity to each other and large numbers of humans. These animals are often in poor health and shed viruses.[37]

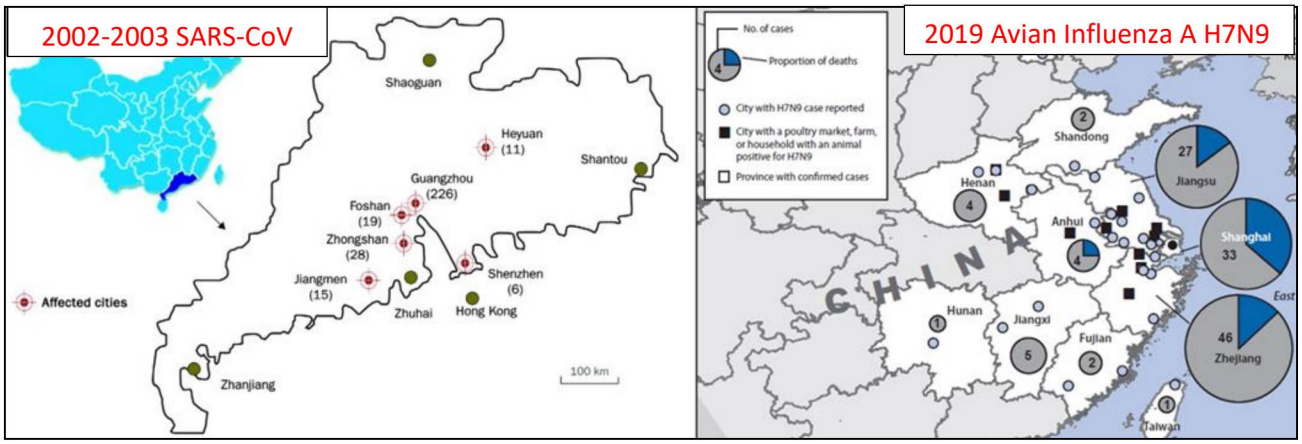


Figure 3: Comparison of Early Outbreaks of SARS-CoV and Avian Influenza H7N9.
Left: Map showing geographic distribution of SARS outbreak in Guangdong Province with dates of independent outbreaks of SARS from Nov. 2002 to Jan. 2003.[38]
Right: Map of confirmed human cases of avian influenza A (H7N9) from Feb. 19, 2013 to April 29, 2013.[39]

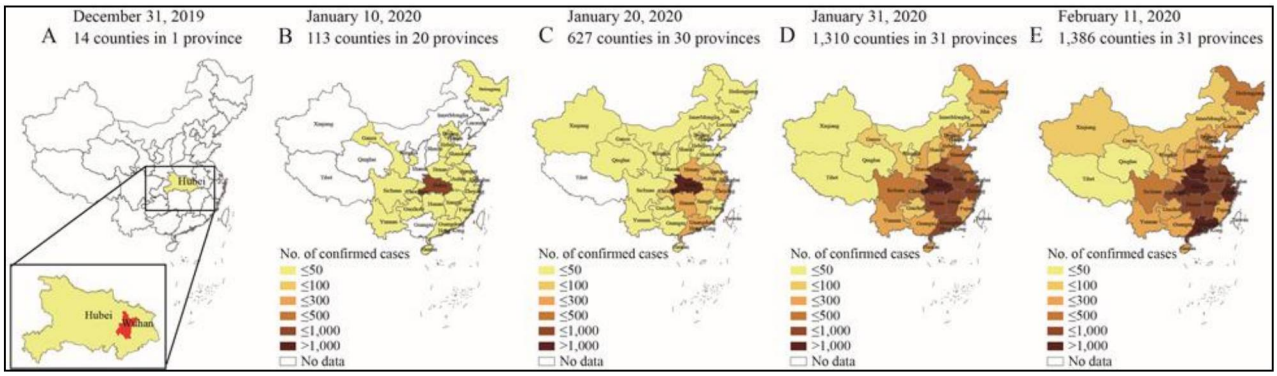


Figure 4: Map showing geo-temporal spread of COVID-19 in China from Dec. 31, 2019 to Feb. 11, 2020, starting only in Wuhan.[40]

A number of epidemiologists and virologists – and, at first, the Chinese government – have asserted that the COVID-19 pandemic originated from a natural zoonotic transmission occurring at the Huanan Seafood Market.[41] Government officials in China have subsequently also postulated the theory that SARS-CoV-2 arrived in China on the surface of imported frozen seafood or was brought into China by infected people or animals after being created by the U.S. military. Support for these alternative theories is limited to government-controlled publications in China and is not credible absent independent corroboration.[42]

Two key facts bolster the natural zoonotic origin argument. First, approximately 33 percent of the earliest known human COVID-19 cases (with symptom onset dates in mid- to late-December 2019) were associated with the Huanan Seafood Market in Wuhan.[43] Second, a number of animal species susceptible to SARS-CoV-2 were sold alive and in poor animal welfare conditions at the market.[44]

However, there is no published genetic evidence that SARS-CoV-2 was circulating in animals *prior* to the start of the COVID-19 pandemic.[45] Additionally, the genomes of early COVID-19 cases did not show genetic evidence, in the form of adaptive mutations that SARS-CoV-2 recently circulated in another animal species other than humans.[46] Moreover, the genetic similarity between the environmental samples and

human viral samples supports the likelihood that the virus found at the Huanan Seafood Market was shed by infected humans, rather than by infected animals.[47]

There also do not appear to have been subsequent spillovers of the virus that generated sustained transmission in humans, or any other independent spillovers of SARS-CoV-2, from the intermediate host animal(s) to humans since the pandemic started.[48] It is also noteworthy that the earliest variants of SARS-CoV-2 were well-adapted for human-to-human transmission.[49]

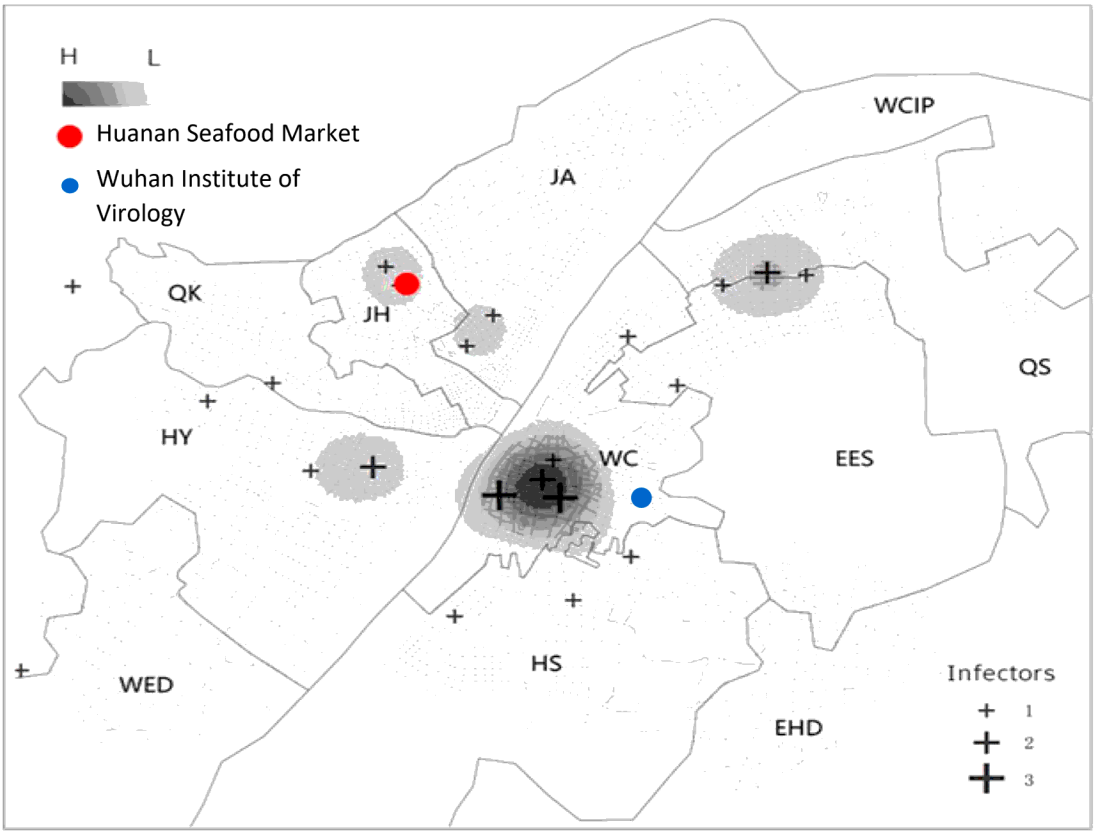


Figure 5: Spatial distribution of Weibo social media platform users who used COVID-19 assistance channel, a web application people searched when looking for flu-like symptoms, from Dec. 20, 2019 to Jan. 18, 2020, overlaid with location of Huanan Seafood Market and Wuhan Institute of Virology's campus in central Wuhan. (Adapted from: Peng, Z., Wang, R., Liu, L., & Wu, H. (2020). Exploring Urban Spatial Features of COVID-19 Transmission in Wuhan Baed on Social Media Data. ISPRS International Journal of Geo-Information, 9(6), 402. MDPI AG. Retrieved from http://dx.doi.org/10.3390/ijgi9060402).

These facts represent a significant break from the precedent of other zoonotic spillovers involving respiratory viruses, such as MERS and SARS. Relevant past zoonotic spillovers are those involving respiratory viruses that, like SARS-CoV-2, spread primarily through aerosols. Relatively recent spillovers involving live animal markets in urban areas are also relevant. Isolated spillovers of viruses in rural areas involving a small number of human infections have less precedential value, as do viruses that transmit primarily through close physical contact or are vector-borne. Accordingly, the SARS epidemic, the emergence of MERS, and several outbreaks of avian-influenzas have greater precedential value than viruses

like monkeypox, Zika, human immunodeficiency virus (HIV), or Ebola, because the viruses and the circumstances of their emergence are more similar to that of SARS-CoV-2.

Early SARS-CoV-2 variants had little genetic diversity and were closely related to each other, differing by only two nucleotides out of approximately 29,900 nucleotides.[50] The fact that only two early variants of the virus have been identified indicates the virus had not been circulating widely or for a long period of time, and hence had little opportunity to mutate and cause new viral variants.[51] This also suggests that SARS-CoV-2 spilled over into humans only once or twice over an approximately two week period, and that these one to two spillovers resulted in sustained human-to-human transmission.[52] This successful spillover also only appears to have occurred in Wuhan or closely surrounding areas.[53]

Understanding the epidemiology of the outbreak is difficult, as the earliest known COVID-19 cases are unlikely to be the first humans actually infected with SARS-CoV-2.[54] The earliest identified COVID-19 cases, reported by PRC government officials, have a symptom onset date of December 8, 2019.[55] A majority of epidemiological modeling indicates that SARS-CoV-2 spilled over into humans between mid-October and early to mid-November 2019.[56] These early Wuhan cases seeded the virus in Wuhan as SARS-CoV-2 spread from person to person after the initial spillover event(s).[57]

The PRC has reported finding no retrospective evidence of COVID-19 cases in October or November 2019.[58] However, retrospective case searches by PRC public health authorities were limited to individuals requiring medical treatment.[59] As a result, the PRC's retrospective case search likely missed between 80 to 95 percent of all COVID-19 cases, which were asymptomatic or mildly symptomatic.[60] Undercounting of early COVID-19 cases is also likely due to China's restrictive case definitions which initially required not only severe COVID-19 symptoms, but a link to the Huanan Seafood Market.[61] It is estimated that during the period from mid-January to early March 2020, China's case definitions did not account for approximately 200,000 COVID-19 cases.[62]

b. Missing Evidence of a Natural Zoonotic Spillover

Environmental samples collected between January and March 2020 at the Huanan Seafood Market from countertops, fridges, gloves, and other surfaces tested positive for SARS-CoV-2.[63] According to presentations made to the World Health Organization (WHO) by PRC government officials and scientists in early 2020, none of the animals at the market when it was closed, in the market's supply chain, or in China's animal farming industry were infected with SARS-CoV-2.[64] That would be a significant variation from multiple precedents from previous natural zoonotic spillovers. For example, the discovery of infected palm civets during the SARS epidemic, and infected chickens and other farmed birds during multiple outbreaks of avian influenza, indicate a pattern where infected animals are expected to be present at the location of zoonotic spillovers and in the related supply chains. [65]

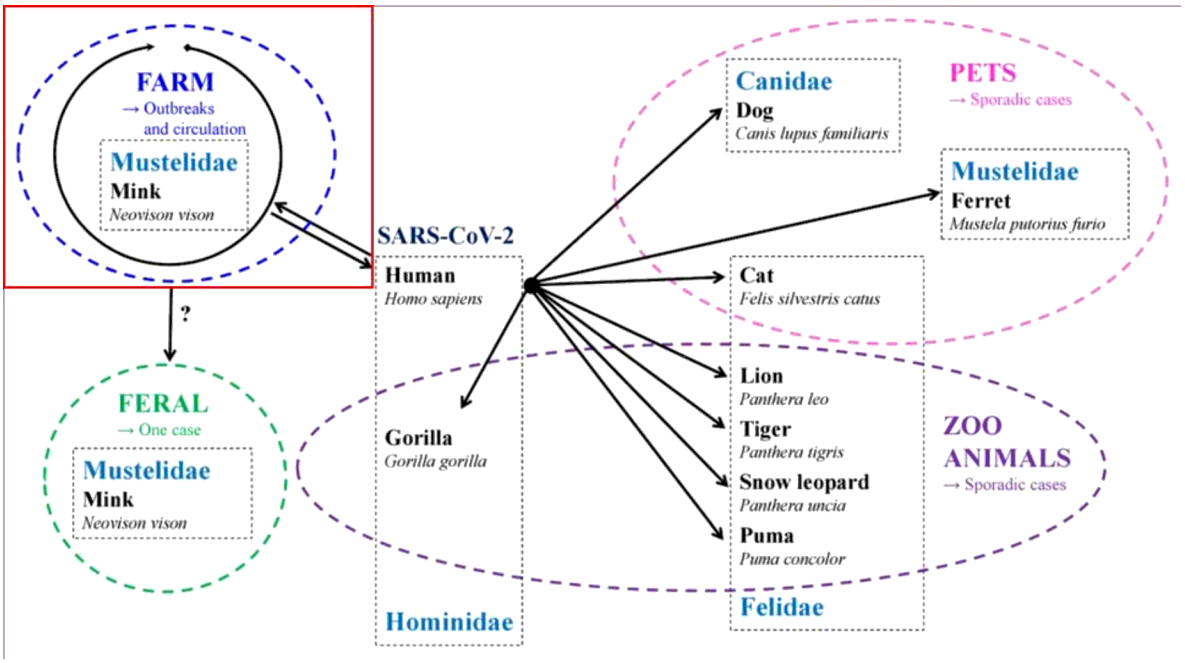


Figure 6: Animal species found to be naturally infected with SARS-CoV-2. Arrows show route of transmission. Red box highlights mink as the only animal known to have transmitted SARS-CoV-2 back to humans.[66]

Cases of human-to-animal transmission of SARS-CoV-2 have led to the identification of a number of mammal species susceptible to the virus that were sold at the Huanan Seafood Market, including mink, foxes, and raccoon dogs.[67] Of these, mink is the only industrially farmed animal identified to have transmitted SARS-CoV-2 from animals to humans with documented cases of farm workers being infected with mink-specific SARS-CoV-2 variants.[68,69]

China is the world's largest producer of farmed mink, raccoon dogs, and foxes.[70] Animal welfare conditions on these farms are poor and present an ideal environment for the spread and zoonotic spillover of SARS-CoV-2.[71] Scientists expect, because of SARS-CoV-2's ability to infect multiple species, that SARS-CoV-2 will likely become endemic in a number of wild animal populations, including mink, deer, and foxes.[72] However, PRC officials still have not reported a single SARS-CoV-2 infection in its farmed or wild mink, raccoon dog, or fox populations.[73] PRC officials and scientists have also reported to the WHO that they have not found a single instance of an animal infected with SARS-CoV-2 prior to the COVID-19 pandemic.[74]

c. Problems with the Natural Zoonotic Hypothesis

Based on precedent and genomics, the most likely scenario for a zoonotic origin of the COVID-19 pandemic is that SARS-CoV-2 crossed over the species barrier from an intermediate host to humans.[75] However, the available evidence is also consistent, perhaps more so, with a direct bat-to-human spillover. Both scenarios remain plausible and, in the absence of additional information, should be considered equally valid hypotheses.[76] However, nearly three years after the COVID-19 pandemic began, critical evidence that would prove that the emergence of SARS-CoV-2 and resulting COVID-19 pandemic was caused by a natural zoonotic spillover is missing.

As described in this report, the following facts and gaps in information are reasons why the natural zoonotic hypothesis is unlikely to explain the origins of SARS-CoV-2:

- The intermediate host species for SARS-CoV-2, if one exists, remains unidentified. By comparison, within six months of the first known human case of SARS, public health officials in China found SARS infections in palm civets and raccoon dogs in live animal markets in Guangdong Province.[77]

- Unlike SARS, the genomes of early COVID-19 cases from the first months of the pandemic do not show genetic evidence of SARS-CoV-2 having circulated in another animal species other than humans. None of the animals tested from the Huanan Seafood Market's supply chain, or in China's animal farming industry were infected with SARS-CoV-2, according to presentations by PRC officials to the WHO.[78]

- SARS-CoV-2's high binding affinity for human ACE2 receptors suggests that it is possible for it to directly infect humans without needing a period of adaptation in an intermediate host.[79] Direct spillover from a bat would explain the failure to find an intermediate host.[80] While direct bat-to-human spillover of coronaviruses has never been confirmed to cause a human outbreak, it is theoretically possible and there is circumstantial evidence suggesting it may occur under limited specific circumstances.[81]

- Based on the available evidence, Wuhan is the only location where SARS-CoV-2 spilled over into humans.[82] After the unidentified source transmitted SARS-CoV-2 to humans, it stopped transmitting SARS-CoV-2.[83] This is at odds with the precedent of the 2002-2004 SARS epidemic where infected palm civets continued to transmit the virus to humans and to raccoon dogs.[84] If the COVID-19 pandemic is the result of a zoonotic spillover from an intermediate host of SARS-CoV-2, the virus would be expected to continue to circulate in the infected intermediate host population, creating the potential for additional independent spillovers into humans and other animals.[85]

- The low genetic diversity of the earliest SARS-CoV-2 samples suggests that the COVID-19 pandemic is most likely the result of a single successful spillover of SARS-CoV-2.[86] Although the possibility of two spillover events cannot be ruled out, both the SARS epidemic and the 2013 avian influenza A (H7N9) outbreaks saw multiple independent spillovers of those viruses and exhibited much greater genetic diversity than early SARS-CoV-2 strains.

Based on this combination of factors, the available evidence appears to be inconsistent with both historic precedent and the scientific understanding of how natural zoonotic spillovers of respiratory viruses like SARS-CoV-2 occur. Ultimately, without increased transparency and publicly available and reproducible evidence that addresses these missing pieces of evidence, it is difficult to support the natural zoonotic origin hypothesis for the SARS-CoV-2 outbreak and COVID-19 pandemic.

Section II
Analysis of Research-Related Incident Hypothesis

Research-related incidents at labs in China, the United States, and elsewhere have happened and, in some instances, resulted in limited human-to-human transmission. For example, there have been at least six research related incidents involving the escape of SARS-CoV from high-containment laboratories in China (four), Taiwan (one), and Singapore (one).[87] The 1977 Influenza A (H1N1) pandemic is now widely accepted to have been the result of research-related incident, most likely a vaccine trial in the Soviet Union or China.[88] In June 2014, while investigating the unintentional exposure of one its researchers to potentially viable anthrax during an experiment in one of its biosafety level (BSL) 3 laboratories, the U.S. Centers for Disease Control and Prevention (CDC) discovered that a culture of non-pathogenic avian influenza was unintentionally cross-contaminated with the highly pathogenic H5N1 strain of influenza and shipped to a BSL3 U.S. Department of Agriculture laboratory.[89] There were no personnel exposures as a result of this event.

In short, human errors, mechanical failure, animal bites, animal escapes, inadequate training, insufficient funding, and pressure for results can lead to an escape of virulent pathogens, which could, in turn, infect animals and humans and lead to a release of a virus from a lab.

a. Coronavirus Research in Wuhan and at the Wuhan Institute of Virology

In the aftermath of the 2002-2004 SARS epidemic, Chinese authorities emphasized research on potential pandemic pathogens, including SARS-related coronaviruses, to develop vaccines and other medical countermeasures with the goal of attempting to predict and prevent the next coronavirus pandemic.[90] Wuhan is a global hub of coronavirus research. The Wuhan Institute of Virology is China's premier coronavirus research institute.[91] Although the WIV's coronavirus research is best documented because of its collaborations with western scientists, multiple institutions in Wuhan study coronaviruses including: Wuhan University, Huazhong Agricultural University, Hubei Centers for Disease Control and Prevention, Hubei Animal Centers for Disease Control and Prevention, Wuhan Centers for Disease Control and Prevention, and the Wuhan Institute of Biological Products, a vaccine manufacturing subsidiary of state-owned Sinopharm.[92] These institutes operate a number of biosafety level (BSL) 2, BSL3, and animal biosafety level (ABSL) 3 laboratories. Several of the BSL3 laboratories are relatively new, having been built only in the last five years. In all, laboratories are spread out across nine different campuses in Wuhan, with six hosting BSL3 or ABSL3 laboratories. The WIV is the only institute in Wuhan with a BSL4 laboratory.[93]

WIV researchers and their collaborators undertook large scale virus collection expeditions to Southern China and Southeast Asia, where bats naturally harbor SARS-related viruses, on an annual basis from 2004 onwards.[94] During these expeditions, scientists collected bat blood, saliva, and urine samples.[95] The WIV collected more than 15,000 bat-related samples around the time the pandemic began.[96] Of these, the WIV had identified more than 220 SARS-related coronaviruses, at least 100 of which have not been made public.[97]

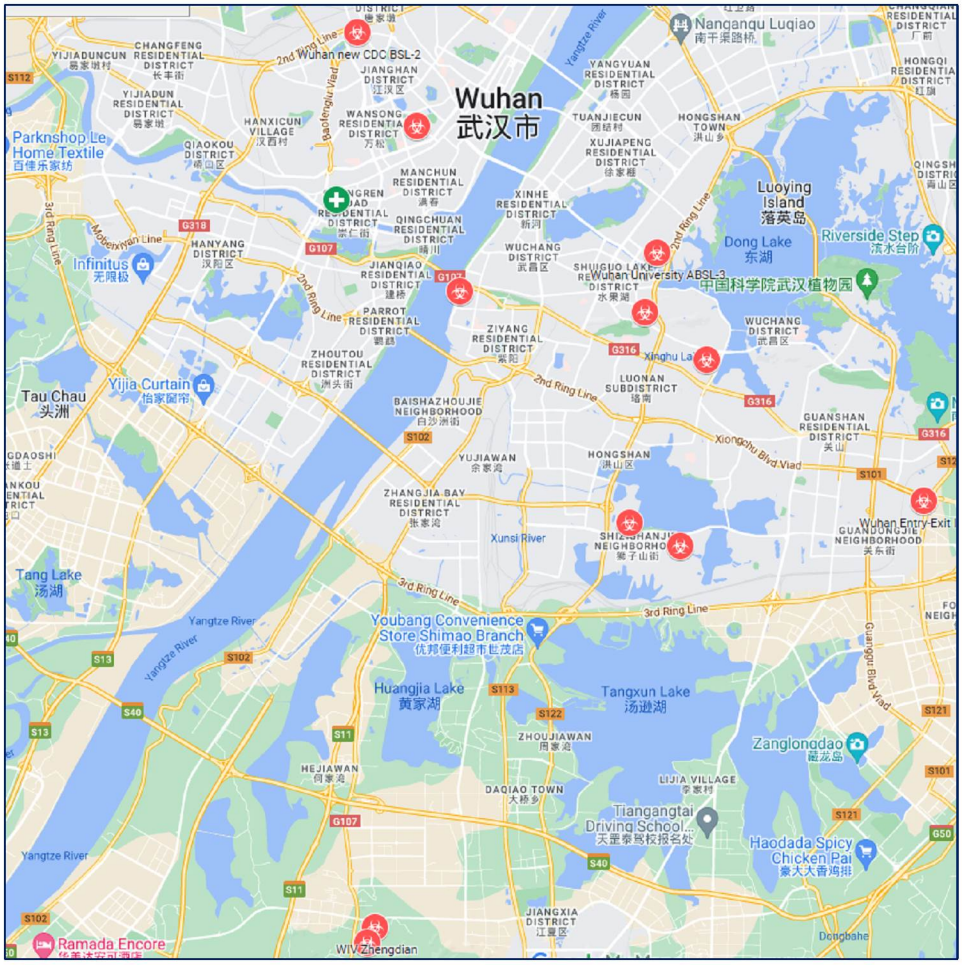


Figure 7: Map of BSL2, 3, and 4 (including ABSL3) laboratories in Wuhan as of December 2019.[98]

WIV researchers actively sampled bats in Southern China and mainland Southeast Asia where the SARS-related coronaviruses most similar to SARS-CoV-2 have been collected and identified.[99] Viruses collected from these regions are 90.7 to 96.8 percent similar overall to SARS-CoV-2.[100] These include RaTG13, which was collected by WIV researchers in Yunnan Province.[101] RaTG13 is 96.3 percent genetically similar to SARS-CoV-2, and its existence was first made public only after the start of the COVID-19 pandemic, in February 2020.[102]

Presentations given by WIV researchers in 2018 show personnel on field expeditions wearing inadequate levels of personal protective equipment while handling bats.[103] Some personnel are photographed wearing "thin surgical masks and rubber gloves as they work [to collect bat samples], while others are unmasked with bare hands."[104] By contrast, a Wuhan Chinese Centers for Disease Control and Prevention (CCDC) scientist, who also regularly conducts bat sampling expeditions, said in a 2019 documentary that "[i]t is while discovering new viruses that we [researchers] are most at risk of infection."[105] The CCDC scientist further stated, "[i]f our skin is exposed, it can easily come in contact with bat excrement and contaminated matter, which means this is quite risky."[106]

Following field collection, samples were transported to Wuhan where they were screened for the presence of coronaviruses.[107] The WIV has two campuses, one in central Wuhan, Xiaohongshan, which

houses BSL2 and 3 laboratories, and a second, newer campus in Wuhan's southern suburbs, Zhengdian, which houses its BSL4 laboratory in addition to a BSL3 and multiple BSL2 laboratories. Researchers at the WIV then conducted experiments on newly isolated and sequenced coronaviruses.[108] Particular attention was given to SARS-related coronaviruses that have the ability to bind to human ACE2 receptors.[109] These viruses were considered by researchers at the WIV to be potential pandemic pathogens and pose a high-risk for spillover into humans.[110] Viruses were then sequenced and evaluated for their potential pandemic risk.[111]

The WIV conducted genetic recombination experiments as part of its coronavirus research in both BSL2 and BSL3 laboratories.[112] The WIV also conducted transgenic humanized mice experiments to assess the pandemic potential of SARS-related viruses.[113] They also tested the efficacy of vaccines in these mice and other animal species.[114] These animal experiments generate highly-infectious aerosols that are "ubiquitous… and are difficult to detect."[115] There were concerns about conducting this type of research in a BSL2 laboratory. As of May 2019, a Chinese CCDC biosafety expert expressed concern about China's lack of national BSL2 regulations, recommending that "[m]anipulation of highly pathogenic microorganisms should be performed in high level biosafety laboratories namely BSL3 or BSL4."[116]

This research process takes several years, leading to a multi-year gap between discovery of a virus and completing a paper ready for publication. For example, a virus genetically similar to SARS-CoV-2, the aforementioned RaTG13, was collected in 2013 and partially sequenced in 2016.[117] The remaining segments of RaTG13 were sequenced in 2018 and the sequence of the virus was finally made public in February 2020.[118] In another instance, one WIV graduate student took several years to publish data that resulted from field collection activities.[119]

b. WIV Research on SARS-related Coronaviruses with Pandemic Potential

By 2018, the WIV showed interest in finding SARS-related coronaviruses that used human ACE2 receptors to enter cells in order to determine whether SARS antibodies would effectively neutralize those viruses.[120] This research effort is described in a March 2018 grant proposal submitted to the Defense Advanced Research Projects Agency (DARPA) by a consortium of research entities, including the WIV, led by the U.S.-based non-governmental organization EcoHealth Alliance. The group proposed to collect and conduct genetic recombination experiments on SARS-related coronaviruses possessing specific traits making them "high-risk" for zoonotic spillover into animals and humans.[121]

Notably, the proposal describes the WIV's intent to search for SARS-related coronaviruses with potential to bind to human ACE2 receptors and that have naturally occurring furin cleavage sites in Yunnan Province, China.[122] According to the proposal, if WIV researchers were unable to find a SARS-related virus with these traits during sampling expeditions, they then proposed to manipulate the ACE2 receptors of SARS-related coronaviruses to increase binding affinity to human lung tissue and to insert furin cleavage sites at the same location where one appears in SARS-CoV-2.[123] This proposal was not ultimately funded by DARPA.

Furin cleavage sites are known to enhance virulence and increase viral replication in avian influenza and Ebola viruses. The grant proposal is in line with research trends in the field of virology in China. In 2015, researchers at Huazhong Agricultural University in Wuhan inserted an artificial furin

cleavage site in Porcine Epidemic Diarrhea virus (an alpha coronavirus).[124] In 2019, researchers in China inserted a four amino acid furin cleavage site into Infectious Bronchitis coronavirus that affects poultry.[125] The WIV also received funding from PRC government agencies for research examining the spillover potential of SARS-related coronaviruses.[126]

In an interview with *Science*, Shi Zhengli, a senior scientist at the WIV and SARS-related coronavirus expert, disclosed that her team infected civets and mice that expressed human ACE2 receptors with chimeric SARS-related coronaviruses.[127] The results of these experiments indicated that SARS-related bat coronaviruses could infect and cause severe illness in humanized mice.[128] [redacted] for failing to produce its laboratory notes and other records relating to these other experiments.[129]

c. WIV Biosafety and Biosecurity Patents and Procurements in 2019

Patents by WIV researchers published in 2018, 2019, and 2020, and procurements made by the WIV in 2019, indicate that the WIV struggled to maintain key biosafety capabilities at its high-containment BSL3 and BSL4 laboratories.[130] The following are examples of some of these patents and procurements:

- On April 24, 2019, WIV researchers submitted a patent for an auxiliary exhaust fan to maintain negative air pressure gradients in BSL3 and BSL4 high-containment laboratories.[131] This auxiliary fan was designed to prevent loss of negative pressure in the event of fan control failures, mechanical failures during fumigation, or human error.[132] These exhaust fans also addressed problems fumigating and disinfecting ventilation shafts and improving penetration of disinfectants into HEPA filters.[133]

- On August 14, 2019, the WIV issued a procurement notice for a project involving its environmental air disinfection system at the WIV's campus in central Wuhan.[134,135,136] The upgraded disinfection system used vaporized hydrogen peroxide to decontaminate laboratory surfaces.[137] A gaseous hydrogen peroxide disinfection system is an effective, less corrosive means to sterilize a laboratory than formaldehyde and other agents used by WIV researchers.[138]

- On September 16, 2019, the WIV issued a procurement notice seeking consultation for a "central air conditioning renovation project" at the new Zhengdian campus.[139] According to the U.S. CDC:

> [HVAC] system design separates potentially contaminated laboratory air from areas outside the laboratory by maintaining the BSL-3/ABSL-3 areas at negative pressure to adjacent areas, by preventing re-circulation of laboratory exhaust air to other areas of the building, and by employing special engineering controls that prevent the occurrence of laboratory airflow reversals to outside the containment boundary.[140]

- On November 19, 2019, the WIV issued a sole source procurement request for an air incinerator at the original Xiaohongshan campus in central Wuhan.[141] The contract for the procurement was to

be issued by December 5, 2019.[142] Air incinerators, though expensive to install and operate, were the mainstay of high-containment air sterilization prior to HEPA filtration.[143, 144, 145] The procurement stated that the incinerator was needed to sterilize exhaust gas from an autoclave, and that it would be added to the exhaust pipe after existing HEPA filters outside the autoclave to incinerate all the media discharged from within.[146]

- On December 11, 2019, WIV researchers filed a patent for a sensor to detect when biocontainment transfer cabinet HEPA filters had failed or were not operating correctly.[147] Experiments with infected animals often require moving the animals from a BSL3/BSL4 laboratory to a holding facility ABSL3/ABSL4 or transferring them from an animal holding room to a specific procedure room.[148] These animals create a variety of potentially hazardous infectious aerosols from urine, feces, fur, and by respiration.[149] The patent states, "when an accident occurs in the transportation process, an effective monitoring device is not available for judging whether the equipment is normal or not."[150]

- On November 13, 2020, WIV researchers filed a patent for a disinfectant formulation that improved upon one used in the Institute's high-containment laboratories.[151] The patented formulation "[r]educe[s] the corrosion effect to metal, especially stainless steel material."[152] As described in the patent, "[l]ong-term use [of the previous disinfectant] will lead to corrosion of metal components such as stainless steel, thereby reducing the protection of … facilities and equipment…shorten[s] its service life and cause economic losses, but also lead to the escape of highly pathogenic microorganisms into the external environment of the laboratory, resulting in loss of life and property and serious social problems."[153] The patent followed a March 2018 study that described WIV researchers using a disinfectant at a concentration more than three times higher than is recommended by the manufacturer.[154,155] The licensed U.S. manufacturer of the disinfectant states that "the higher … concentration, the more corrosive the solution will be."[156]

d. WIV Biosafety and Biosecurity Events in 2019

With the start of operations at the WIV's new BSL4 laboratory in late-2017 to 2018, government officials pressured WIV researchers to "leapfrog development" by conducting cutting-edge infectious disease research that contributed to China's national goals for biotechnology.[157] Throughout 2019, WIV experts published on challenging biosafety and biosecurity conditions faced by high-containment laboratories in China, including the WIV.

In May 2019, the Director of the WIV BSL4 laboratory warned that in high-containment laboratories in China:

> **Maintenance cost[s] [are] generally neglected; several high-level BSLs have insufficient operational funds for routine yet vital processes.** Due to the limited resources, some BSL-3 laboratories run on extremely minimal operational costs or in some cases none at all…

> Currently, most laboratories lack specialized biosafety managers and engineers. In such facilities, some of the skilled staff is composed by part-time researchers. **This makes it difficult to identify and mitigate potential safety hazards in facility and equipment operation early enough**. Nonetheless, biosafety awareness, professional knowledge, and operational skill training still need to be improved among laboratory personnel. (emphasis added)[158]

In July 2019, China's National People's Congress drafted legislation, which later became law, to strengthen the management of laboratories involved in pathogen research and improve adherence to national standards and requirements for biosafety. It specifies that:

> [L]ow-level pathogenic microorganism laboratories **shall not engage in pathogenic microorganism experiments that should be conducted in high-level pathogenic microorganism laboratories**...High-level pathogenic microorganism laboratories engaging in experimental activities of highly pathogenic or suspected highly pathogenic microorganisms shall be approved by the health or agriculture and rural authorities at or above the provincial level. For pathogenic microorganisms that have not been discovered or have been eliminated...relevant experimental activities shall not be carried out without approval. (emphasis added)[159]

Efforts by the WIV to improve biosafety were hampered by what officials called the "stranglehold problem," which meant a lack of access to advanced foreign biosafety technologies and materials.[160] Leadership at the WIV emphasized during a June 2019 meeting with WIV officials that addressing the "stranglehold problem" was critical to "pushing forward the construction and... development of science and technology for the nation."[161] The WIV's limited access to key foreign biosafety technologies forced the researchers to develop biosafety methods and construct equipment to remedy shortfalls.[162]

In July 2019, WIV leadership led a series of internal meetings on problems of operations in management at the WIV. The deputy director of the BSL4 laboratory issued a report on biocontainment equipment shortages and the impact of meeting the research goals of the government.[163] The report cited major problems that existed in the BSL4 laboratory including "hardware and technological aspects of the laboratory facilities" and "the management of biosafety."[164] The same report noted that the Director of the WIV urged the institute's senior personnel to "prioritize solving the urgent problems we are currently facing."[165]

On September 12, 2019 between the hours of 2:00 and 3:00 a.m. local time,[166] the WIV took down its online depository of data on viral sequences called the Wildlife-Borne Viral Pathogen Database.[167] The database was intermittently accessible from December 2019 to February 2020, before being permanently taken offline February 2020.[168] This database was previously accessible to the public, with the exception of a password protected section, which held unpublished sequence data accessible only to WIV personnel.[169] The WIV had a collection of more than 15,000 samples from bats, from which they had identified more

than 1,400 bat viruses, including an estimated 100 unpublished sequences of SARS-related coronaviruses – the genre of coronaviruses to which SARS-CoV-2 belongs.[170] More than three years after it was first disabled, public access to the database has not been restored.[171]

On November 12, 2019, the WIV's BSL4 laboratory team issued a report on the achievements of the BSL4 laboratory since it began operations in 2018.[172] With respect to the "stranglehold problem", the report states that the WIV had overcome "the three no's" of "no equipment and technology standards, no design and construction teams, and no experience operating or maintaining" a high-containment laboratory.[173] The report continues to say that WIV personnel "brought into reality the 'three haves' of a complete system of standards, a superior team that operates and maintains [the lab], and valuable experience with construction."[174] This was achieved by "reinventing" imported equipment to make "the lab construction satisfy domestic and international standards" and making the French design of the BSL4 laboratory "conform to the requirements of Chinese construction."[175]

The report also described a high-pressure work environment. "In the laboratory, they often need to work for four consecutive hours, even extending to six hours," the report revealed. "During this time, they cannot eat, drink, or relieve themselves. This is an extreme test of a person's will and physical endurance. This not only demands that research personnel possess proficient operational skills, but they must also possess the ability to respond to various unexpected situations."[176]

The November 12, 2019 report suggested a biosafety problem had occurred at the WIV sometime before November 2019:

> Owing to [the fact] that the subject of research at the P4 lab is highly pathogenic microorganisms, inside the laboratory, once you have opened the stored test tubes, it is just as if having opened Pandora's Box. These viruses come without a shadow and leave without a trace. Although [we have] various preventive and protective measures, it is nevertheless necessary for lab personnel to operate very cautiously to avoid operational errors that give rise to dangers. **Every time this has happened, the members of the Zhengdian Lab [BSL4] Party Branch have always run to the frontline, and they have taken real action to mobilize and motivate other research personnel.** (emphasis added)[177]

On November 19, 2019, seven days after the BSL4 teams' report was issued, the WIV hosted a special training session run by a senior Chinese Academy of Sciences biosafety/biosecurity official who relayed "important oral and written instructions" from PRC leadership in Beijing to the WIV regarding the "complex and grave situation facing [bio]security work."[178] At the same training session, the Deputy Director of the Office of Safety and Security at the WIV "pointed to the severe consequences that could result from hidden safety dangers, and stressed that the rectification of hidden safety risks must be thorough, and management standards must be maintained."[179]

Section III
China's Early COVID-19 Vaccine Development Versus the U.S. Operation Warp Speed

Once the scale of the COVID-19 pandemic became clear, governments around the world scrambled to accelerate development of a vaccine to prevent death and severe disease from infection. In order to start vaccine development, researchers required the complete sequence of the target virus.[180] The full genetic sequence of SARS-CoV-2 was first posted to a global virus database on January 11, 2020 by a professor in China who acted in violation of PRC government restrictions on sharing information about SARS-CoV-2. As a consequence of his action, his laboratory was shut down for "rectification."[181]

After the SARS-CoV-2's sequence became available, vaccine developers inserted portions of the viral sequence into cells to produce the proteins that elicit an immune system response.[182] The cells that produce the proteins are called "constructs" and have to be created before vaccine development can begin.[183] After the construct is complete, the next developmental steps are preclinical animal toxicity, safety and efficacy studies, human clinical safety and efficacy trials, and commercial scale vaccine production.[184] Typically, these steps are done sequentially.[185]

During the COVID-19 pandemic, the urgent need for a vaccine resulted in these steps being done concurrently, which reduced the time spent on each step from years to a few months.[186] However, while pre-clinical studies and vaccine production can be done simultaneously, each step has its own timeline to completion that is difficult to compress. For example, animal studies are designed to last a specific length of time and cannot be curtailed without compromising the resulting data.[187] Similarly, the time it takes to grow the amount of vaccine needed for phase I trials is a limiting step, depending on the vaccine platform and scale of production.

a. U.S. Operation Warp Speed

The companies with candidate vaccines that would later be funded and supported by Operation Warp Speed in the United States all started vaccine development work on January 11, 2020 after the public release of the first SARS-CoV-2 sequence.[188] While mRNA vaccine candidates were able to design their vaccine construct in two days, because mRNA vaccines only need the coronavirus' genetic sequence to make a vaccine and no virus has to be cultivated in labs, traditional vaccine platforms take longer.[189]

The fastest of the Operation Warp Speed vaccine candidates to enter phase I human clinical trials among the non-mRNA vaccines was AstraZenca-Oxford's vaccine, ChAdOx1.[190] The AstraZeneca-Oxford team leveraged an existing vaccine construct and extensive experience with it to advance their candidate into phase I human clinical trials in an unprecedented 103 days.[191] Johnson & Johnson's vaccine candidate, Ad26, went from sequence to phase I clinical trials in 185 days.[192] As with AstraZeneca-Oxford, Johnson & Johnson was able to modify an existing construct it had developed for Ebola, as well as extensive institutional experience in vaccine development.[193] Both Ad26 and ChAdOx1 were adenovirus vaccines, in which a weakened version of the virus that cannot replicate is used to stimulate an immune reaction.[194]

Operation Warp Speed brought the first COVID-19 vaccines from sequence publication to regulatory approval in approximately eight months; "[o]ther medical miracles have been achieved, but few

with the speed and success of developing the Covid-19 vaccines."[195] Operation Warp Speed accelerated development of COVID-19 vaccines by coordinating with the U.S. Food and Drug Administration (FDA) and Centers for Disease Control and Prevention, providing technical assistance, breaking through supply chain and manufacturing bottlenecks with the Defense Production Act, and de-risking vaccine development through guaranteed purchase agreements.[196] Vaccine developers ran clinical trials concurrently and on an accelerated timeline. The lessons learned from Operation Warp Speed have been widely shared, studied, and publicized, so it can serve as a model for how to quickly mobilize the government and private sector in response to an emergency.[197]

b. China's COVID-19 Vaccine Development Program

China also initiated a COVID-19 vaccine development with at least four research teams involved.[198] China did not initially have a mRNA vaccine candidate.[199] Two of these research teams were from the People's Liberation Army's Academy of Military Medical Sciences (AMMS), with the others from the Chinese Academy of Sciences (CAS) and the Chinese Centers for Disease Control and Prevention (CCDC).[200] The two AMMS teams reached notable early milestones in COVID-19 vaccine development. One AMMS team, led by Major General Chen Wei, using the same adenovirus vaccine platform as AstraZeneca-Oxford and Johnson & Johnson, went from sequence publication on January 11, 2020 to phase I human clinical trials on March 18, 2020, a span of only 67 days.[201]

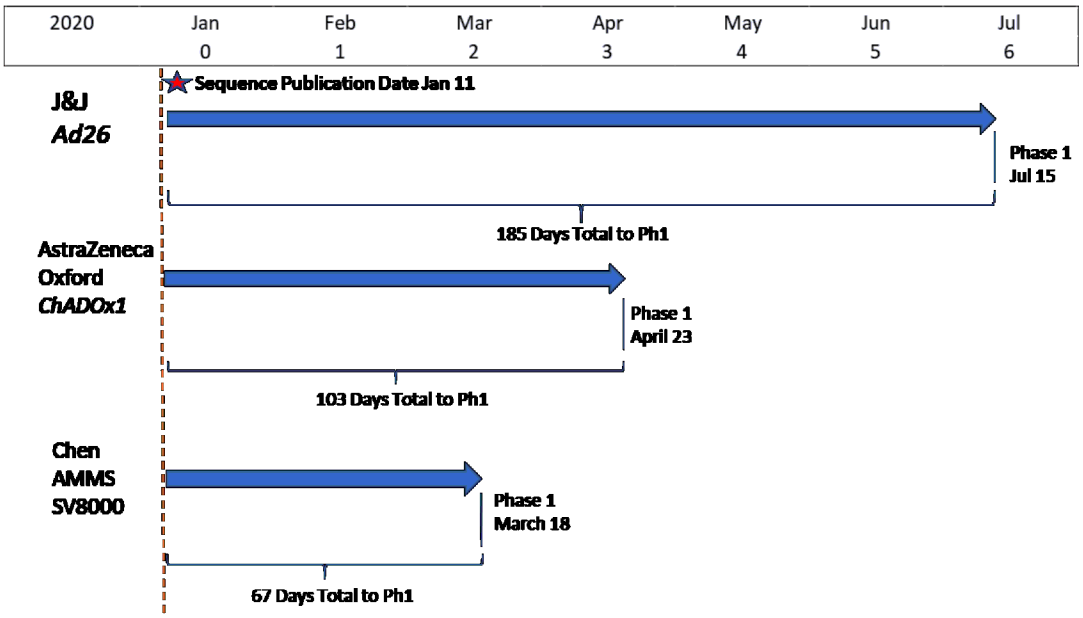


Figure 8: Comparison of Adenovirus Platform Timelines. Operation Warp Speed Vaccines: Johnson & Johnson's Ad26 and AstraZeneca-Oxford's ChADOx1 compared to Chen-AMMS's SV8000

The second AMMS team, led by Brigadier General Yusen Zhou, was the first to patent a COVID-19 vaccine on February 24, 2020.[202] The Zhou AMMS team's patent included data from a mouse experiment showing that the vaccine construct neutralized SARS-CoV-2 infections.[203] Other researchers in China working with the same vaccine platform took between three to four months to develop their candidate

vaccine.[204] The Zhou AMMS COVID-19 vaccine candidate does not appear to have advanced into phase I human clinical trials.[205] The Chen AMMS COVID-19 vaccine is commercially produced by CanSino.[206]

Given Operation Warp Speed's success, it is unusual that the two AMMS COVID-19 vaccine development teams were able to reach early milestones in vaccine development even more quickly. The Chen AMMS team beat AstraZeneca-Oxford to phase I clinical trials by 38 days. The Zhou AMMS team built and validated the effectiveness of its COVID-19 candidate vaccine 44 days after the sequence of SARS-CoV-2 was released. The extremely accelerated vaccines development timelines achieved by the AMMS teams pose the following two outstanding questions:

- What additional steps, processes, or novel techniques did AMMS researchers take that advanced the development of their vaccine faster than the Operation Warp Speed timeline?

- If no additional steps were taken to speed up the development timeline, when did researchers in China have access to the genomic sequence? Was it before January 11, 2020? If so, how far in advance of January 11, 2020?

Section IV

Basis for Assessment that Research-Related Incident is More Likely Origin of SARS-CoV-2

[redacted][209]

Although the WIV's coronavirus research is best documented because of its collaborations with western scientists, multiple institutions in Wuhan study coronaviruses including: Wuhan University, Huazhong Agricultural University, Hubei Centers for Disease Control and Prevention, Hubei Animal Centers for Disease Control and Prevention, Wuhan Centers for Disease Control and Prevention, and the Wuhan Institute of Biological Products, a vaccine manufacturing subsidiary of state-owned Sinopharm.

a. Coronavirus Research at the Wuhan Institute of Virology

The WIV is an epicenter of advanced coronavirus research that was designed to predict and prevent future pandemics by collecting, characterizing, and experimenting on "high-risk" coronavirus with the potential to spill over into humans:

- In the aftermath of the 2002-2004 SARS epidemic, WIV researchers undertook annual virus collection expeditions to Southern China and Southeast Asia, where bats naturally harbor SARS-related viruses, from 2004 onward.[210]

- WIV researchers actively sampled bats in Southern China and Southeast Asia where the SARS-related coronaviruses most similar to SARS-CoV-2 have been collected and identified.[211]

- The WIV had collected more than 15,000 samples from bats, from which they had identified more than 1,400 bat viruses, including an estimated 100 unpublished sequences of SARS-related coronaviruses – the genre of coronaviruses to which SARS-CoV-2 belongs.[212] The database containing the sequences of viruses collected by the WIV, including unpublished SARS-related coronaviruses, was taken offline starting in September 2019.

- Following field collection, samples were transported to Wuhan, where they were screened for the presence of coronaviruses.[213] WIV researchers performed animal and human cell-related research using recombinant genetic techniques with the express goal of discovering human adapted SARS-like chimeric viruses. The WIV conducted these experiments in BSL2 and BSL3 laboratories.

- Senior coronavirus researcher Shi Zhengli disclosed that in 2018-2020, her team infected civets and humanized mice that expressed human ACE2 receptors with chimeric SARS-related coronaviruses.[214] The results of these experiments have never been published.

- [redacted] SARS-CoV-2 shares many of the traits these researchers were interested in finding in SARS-related coronaviruses or interested in engineering such traits if they were not found naturally.

b. Evidence of Biosafety Failures at the WIV

WIV patents and procurements suggest that the WIV experienced persistent biosafety problems relevant to the containment of an aerosolized respiratory virus like SARS-CoV-2.

- April 24, 2019: Auxiliary exhaust patent
- August 14, 2019: Environmental air disinfection system procurement
- September 16, 2019: Central air conditioning
- November 19, 2019: Sole source procurement for air incinerator
- December 11, 2019: Biocontainment transfer cabinet HEPA filter failure patent
- November 13, 2020: Disinfectant formulation patent

c. Management and training concerns at the WIV

Academic articles, reports, and meetings from the WIV also suggest that the WIV experienced persistent biosafety problems relevant to the containment of an aerosolized respiratory virus like SARS-CoV-2:

- In May 2019, the Director of the WIV BSL4 laboratory warned that in high-containment laboratories in China maintenance costs were neglected and part-time researchers made it "**difficult to identify and mitigate potential safety hazards in facility and equipment operation early enough.**" (emphasis added) [216]

- Leadership at the WIV emphasized during a June 2019 meeting with WIV officials that addressing the "stranglehold problem" was critical to "pushing forward the construction and… development of science and technology for the nation."[217]

- In July 2019, the deputy director of the BSL4 laboratory issued a report on shortages of biosafety equipment and its impact on meeting the research expectations of the government.[218]

- In July 2019, China's National People's Congress began the process of drafting the law to strengthen the management of laboratories involved in pathogen research and improve adherence to national standards and requirements for biosafety.[219]

- A November 12, 2019 report suggested a biosafety problem had occurred at the WIV sometime before November 2019.[220]

- On November 19, 2019, the WIV hosted a special training session by the senior Chinese Academy of Sciences biosafety/biosecurity official who relayed "important oral and written instructions" from PRC leadership to the WIV regarding the "complex and grave situation facing [bio]security work."[221] This one-day training session for senior leadership was followed on November 20-21, 2019 with two days of safety training for personnel from the WIV and other Wuhan area high-containment laboratories.

d. Anomalies in Epidemiology of SARS-COV-2 Outbreak

- SARS-CoV-2 spilled over into humans only in Wuhan.[222] This is a break with the precedent of SARS, MERS, and multiple outbreaks of avian influenza, all of which were much less transmissible than SARS-CoV-2 and infected fewer animals.

- The low genetic diversity of the earliest SARS-CoV-2 samples, coupled with one of the two early lineages being more closely related to bat coronaviruses, suggests that COVID-19 pandemic is most likely the result of one, or at most two, spillovers of SARS-CoV-2.[223] SARS-CoV-2's low initial genetic diversity is also a break with the precedent of recent zoonotic spillovers of respiratory viruses.

- Critical corroborating evidence of a natural zoonotic spillover is missing. While the absence of evidence is not itself evidence, the lack of corroborating evidence of a zoonotic spillover or spillovers, three years into the pandemic, is highly problematic. If the COVID-19 pandemic is the result of the zoonotic spillover of SARS-CoV-2 in Wuhan from an intermediate host species, there should be evidence of SARS-CoV-2 circulating in animals before it spilled over into humans. Instead, there is no evidence that any animal was infected with SARS-CoV-2 prior to the first human cases.[224]

Conclusion

As noted by the WHO Scientific Advisory Group for the Origins of Novel Pathogens, the COVID-19 Lancet Commission, and the U.S. Office of the Director of National Intelligence 90-Day Assessment on the COVID-19 Origins, more information is needed to arrive at a more precise, if not a definitive, understanding of the origins of SARS-CoV-2 and how the COVID-19 pandemic began.[225] Governments, leaders, public health officials, and scientists involved in addressing the COVID-19 pandemic and working to prevent future pandemics, must commit to greater transparency, engagement, and responsibility in their efforts.

Based on the analysis of the publicly available information, [redacted] New information, made publicly available and independently verifiable, could change this assessment. However, the hypothesis of a natural zoonotic origin no longer deserves the benefit of the doubt, or the presumption of accuracy. The following are critical outstanding questions that would need to be addressed to be able to more definitively conclude the origins of SARS-CoV-2:

- What is the intermediate host species for SARS-CoV-2? Where did it first infect humans?
- Where is SARS-CoV-2's viral reservoir?
- How did SARS-CoV-2 acquire its unique genetic features, such as its furin cleavage site?

Advocates of a zoonotic origin theory must provide clear and convincing evidence that a natural zoonotic spillover is the source of the pandemic, as was demonstrated for the 2002-2004 SARS outbreak. In other words, there needs to be verifiable evidence that a natural zoonotic spillover actually occurred, not simply that such a spillover could have occurred.

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[207] *Supra*, note 43.

[208] Rambaut, A., Holmes, E. C., O'Toole, Á., Hill, V., McCrone, J. T., Ruis, C., du Plessis, L., & Pybus, O. G. (Jul. 15, 2020). A dynamic nomenclature proposal for SARS-CoV-2 lineages to assist genomic epidemiology. *Nature microbiology*, *5*(11), 1403–1407. https://doi.org/10.1038/s41564-020-0770-5.

[209] *Supra*, note 43.

[210] *Supra*, note 94.

[211] BurNIH-00000483-495 (on file with staff).

[212] *Supra*, note 97.

[213] Cohen J. (Jul. 31, 2020). Wuhan Coronavirus Hunter Shi Zhengli speaks out. Science. 369(6503), 487–488. https://doi.org/10.1126/science.369.6503.487.

[214] *Id.*

[215] *Id.*

[216] *Supra*, note 158.

[217]Wuhan Institute of Virology. (June 21, 2019). Wuhan Institute of Virology Convenes Promotion Meeting for Work on the Educational Theme of 'Staying True to our Original Aspiration, Keeping Firmly in Mind our Mission' and a Study Session of the Expanded Party Committee Central Group. (on file with staff).

[218] Wuhan Institute of Virology. (July 30, 2019). Wuhan Institute of Virology Convenes Study by the Party Committee's Plenary Central Group and Special Investigation and Study Meeting of the Educational Theme 'Never Forgetting our Original Aspiration and Keeping Firmly in Mind our Mission'. (on file with staff).

[219] *Supra*, note 159.

[220]*Supra*, note 172.

[221]Wuhan Institute of Virology. (Nov. 21, 2019). Wuhan Institute of Virology Launches Training on Safety Work. (on file with staff).

[222] *Supra*, note 17.

[223] *Supra*, note 86.

[224] *Supra*, note 43.

[225] *Supra*, note 2; *see also* Sachs, J. D., Karim, S. S. A., Aknin, L., Allen, J., Brosbøl, K., Colombo, F., Barron, G. C., Espinosa, M. F., Gaspar, V., Gaviria, A., Haines, A., Hotez, P. J., Koundouri, P., Bascuñán, F. L., Lee, J.-K., Pate, M. A., Ramos, G., Reddy, K. S., Serageldin, I., & Thwaites, J. (2022). The Lancet Commission on lessons for the future from the COVID-19 pandemic. The Lancet, 0(0). https://doi.org/10.1016/S0140-6736(22)01585-9. *See also*: Office of the Director of National Intelligence. (2021). Updated Assessment on COVID-19 Origins. https://www.dni.gov/files/ODNI/documents/assessments/Declassified-Assessment-on-COVID-19-Origins.pdf.

EXHIBIT 14

EXHIBIT 14

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September 12, 2022

Donald Trump, Senator Ron Johnson, Senator Rand Paul, Rep. Jim Jordan, and others were right. As early as late April or early May of 2020 former President Trump spoke of the creation of SARS-COV2 in a lab in Wuhan, China. Since that time both the investigation and the cover-up have continued but the evidence provided herein clearly demonstrate that SARS-COV2 was indeed created in a lab in Wuhan China by EcoHealth Alliance and with funding from Anthony Fauci's NIH/NIAID.

Evidence included herein demonstrate the following key points (amongst others):

1. SARS-COV2 was created in the lab in Wuhan, China;
2. Anthony Fauci funded the creation of SARS-COV2 and lied to Congress about funding Gain-of-Function work;
3. The US Intelligence Community was aware of and appeared to have been involved with the funding of said Gain-of-Function work;
4. A number of well-connected public and private partners were involved in the Gain-of-Function work that resulted in the creation and release of SARS-COV2;
5. Anthony Fauci and others coordinated to cover-up the funding of the Gain-of-Function work that resulted in SARS-COV2.

Given the recent high-profile criminal enforcement actions taken by Congress and the DoJ, we expect immediate investigations will see bi-partisan support in light of this newly compiled information. Renz Law and Make Americans Free Again (MAFA) will provide any and all support possible in such investigations and prosecutions. Further, with the additional high-profile revelations that certain segments of the government have promoted censoring this information, presumably as part of this same cover-up, we will voluntarily support any good-faith efforts by the media to correct the record.

As has been the case since early in the pandemic, Renz Law and MAFA will continue to seek truth and justice in this matter for all that have been impacted by the worst man-made pandemic in human history.

Sincerely,

Thomas Renz

Renz Law, LLC

RENZ LAW, LLC.

Answering Crucial Questions About Sars-CoV-2

Thomas Renz, attorney at law
Pamela A. Popper, Make Americans Free Again

Executive Summary

In early 2020, billions of people were told by governments and health agencies all over the world that a "novel virus" had caused severe illness in several individuals in Wuhan, China. Shortly after this announcement, people were told that the lethality rate for this virus, SARS-CoV-2, could be ten times higher than typical flu. The entire world started organizing to prevent the healthcare system from being overwhelmed with seriously ill patients, and to prevent as many deaths as possible. Government and health officials issued orders requiring businesses, schools, and houses of worship to close. People were told not to leave their homes except to purchase food and essential items and for emergency healthcare. Masks were required in all public indoor and outdoor places. Parks and beaches and trails were closed. Special events worldwide were cancelled for almost two years. Life as we know it came to a screeching halt and has not yet returned to normal.

In spite of these draconian measures, the World Health Organization reports that as of September 9, 2022, there have been over 600 million cases of SARS-CoV-2 and over 6.4 million deaths reported worldwide.[1]

Damage due to SARS-CoV-2 is not limited to illness and death from the virus itself. Hundreds of thousands of businesses were bankrupted and families lost their livelihoods. The unemployment rate skyrocketed. The incidence of depression, anxiety, and other psychological disorders increased dramatically. Unprecedented harm was inflicted on children; school closures, masks, and relentless fear resulted in developmental delays and academic failure for millions of kids of all ages.

The response to this disaster must be to prevent this from happening again. The only way to protect the world from another devastating debacle like this is to get to the bottom of its origin. Almost three years after the first SARS-CoV-2 patients were reported in Wuhan, China, most Americans still do not know the truth about the origin of SARS-CoV-2. There are many as-yet unanswered questions:

- Where did SARS-CoV-2 come from? Lab? Animal?
- If SARS-CoV-2 was developed in a lab, which one(s)?
- Who was involved in the development of SARS-CoV-2?

[1] WHO Coronavirus (COVID-19) Dashboard. https://covid19.who.int/ accessed 9.9.2022

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- Who paid for it?
- And why has this information not been made public?

This document is designed to answer these questions, with the best evidence available at this time. Arriving at a conclusion required the analysis of large amounts of research, some of which is quite complex. We have done our best to summarize complex data in relatively easy-to-understand terms.

The story of SARS-CoV-2 involves many government officials and agencies; academic research centers and research centers; and funding sources. We will discuss many of them here, but have determined that only a few bare most of the responsibility for SARS-CoV-2, and this document focuses on these individuals and organizations:

- Peter Daszak and his organization EcoHealth Alliance,
- Anthony Fauci, head of The National Institute of Allergy and Infectious Diseases,
- Shi Zhengli, Chinese virologist who headed the Center for Emerging Infectious Diseases at the Wuhan Institute of Virology,
- Ralph Baric, Professor in the Department of Epidemiology and the Department of Microbiology and Immunology at the University of North Carolina, Chapel Hill.

We believe that in the coming weeks and months, partly in response to making this document public, more evidence will become available. We do not expect new disclosures to change any conclusions herein; but rather that more people coming forward will strengthen our findings.

As for how to organize our findings, we decided to relate the information as sequentially as possible, and to provide background information where appropriate. This document, is, essentially, the "story of SARS-CoV-2."

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Table of Acronyms

BLAST	Basic Local Alignment Search Tool
BSL	Bio-Safety Level
CCP	Chinese Communist Party
CDC	Centers for Disease Control
DARPA	U.S. Defense Advanced Research Projects Agency
DHHS	Department of Health and Human Services
EUA	Emergency Use Authorization
FCS	Furin Cleavage Site
FOIA	Freedom of Information Act
GoF	Gain of Function
NCBI	National Center for Biotechnology Information
NIAH	National Institute of Aging
NIAID	National Institute of Allergy and Infectious Diseases
NIH	National Institutes of Health
PRC	People's Republic of China
UNCH	University of North Carolina, Chapel Hill
USAID	U.S. Agency for International Development
USG	US Government
WHO	World Health Organization
WIV	Wuhan Institute of Virology

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About Andrew G. Huff PhD.

Andrew G. Huff worked at EcoHealth Alliance for a period of time and was a first-hand witness to the design and engineering of SARS-CoV-2. Dr. Huff has provided considerable valuable information to Renz Law concerning the origin of SARS-CoV-2 and the misbehavior that took place during the planning and execution of research supported by or conducted by EcoHealth Alliance. Information from his first-hand account, which is supported by a deposition under penalty of perjury, is included in this document.

Dr. Huff served in the U.S. Army, was involved in the Global War on Terrorism in Central America, and was engaged served in combat operations in Iraq.

After returning home from Iraq, Dr. Huff completed a bachelor's degree in psychology at the University of Minnesota, one of the top psychology research institutions in the world. He worked for the U.S. Department of Veterans Affairs, both relocating and building new outpatient mental healthcare offices.

Dr. Huff then earned a master's degree in Security Technologies with a Geographic Information Systems minor, also from the University of Minnesota. He was offered a full scholarship and earned a Ph.D. in the fields of bioterrorism, biowarfare, chemical warfare, pandemics, and emerging infectious disease. His research was published in peer-reviewed journals before he submitted his dissertation for review.

Dr. Huff then worked as a Research Fellow at the Department of Homeland Security Center of Excellence. During his tenure there, he presented research at high-level government meetings and to executives in the private sector.

While employed with Sandia National Laboratories, Dr. Huff was given Department of Energy "Q" clearance ,which is equivalent to a Department of Defense "Top Secret" Clearance with a Special Access Programs designation. He analyzed national security problems, served as a subject matter expert in public health and food protection, and worked on projects related to pandemic preparedness, mitigation, and response.

When he decided to leave public sector work, he applied for a position at EcoHealth Alliance in September 2014. Dr. Peter Daszak offered, and Dr. Huff accepted, a position as Senior Scientist

in charge of the Data and Technology team. During his time at EcoHealth, Dr. Huff was prepared reports for U.S. intelligence agencies, and reviewed proposals for funding gain of function research to the National Institute for Allergies and Infectious Diseases as routine scientific tasks. He eventually was promoted to Vice President after demonstrating that he could raise funds from wealthy donors and government project sponsors; design and successfully execute sophisticated research and development projects; and build high-functioning cohesive teams rapidly.

Dr. Huff has personal knowledge and documents related to the origin of COVID-19 and has shared both with Renz Law. His personal declaration is included in this document as evidence to support many assertions we make.

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What is Gain-of Function Research?

For purposes of this discussion, gain-of-function research involves manipulating viruses in a laboratory setting to investigate their potential to infect humans.

Here is a description of how gain-of-function research was conducted on a virus to make it transmissible to humans and to potentially make it more deadly to humans (in other words, the creation of SARS-CoV-2):

- First, the genome of an existing virus is mapped.
- In one approach, a virus is passaged in host animals (for example from mouse-to-mouse or ferret-to-ferret) repeatedly until a virus with different properties emerges. The virus may not have the capability of infecting a targeted animal species at the beginning of the project but gains this capability to infect the target animal through serial transmission.
- Another approach involves directly engineering changes in the genome of the virus. In the case of SARS-CoV-2, a genetically engineered spike protein created in the lab, was inserted into the genetic sequence of a virus. The high affinity of this spike protein to the ACE2 receptor in the body increased the infectivity of what became SARS-CoV-2.
- The new virus was then tested on humanized mice (biologically modified with a human receptor that enabled the new SARS-CoV-2 to enter their cells) and on human lung cells in the lab.
- Researchers succeeded in infecting human epithelial cell preparations and making the living mice sick with SARS-CoV-2. They knew they had created a virus that could infect humans.
- They then made the absurd claim that this process can happen in nature, which is why more funding should be allocated to conduct more of this type of research.

This type of research is controversial due to the risk of accidental release of a mutated virus that results from these experiments. While hundreds of researchers have spoken out against it, Dr. Anthony Fauci (head of the National Institute of Allergy and Infectious Diseases or NIAID) has historically defended this type of research. In an editorial in the *Washington Post* on December 30 2011, Fauci wrote: "[D]etermining the molecular Achilles' heel of these viruses can allow scientists to identify novel antiviral drug targets that could be used to prevent infection in those at risk or to better treat those who become infected. Decades of experience tells us that disseminating information gained through biomedical research to legitimate scientists and health

officials provides a critical foundation for generating appropriate countermeasures and, ultimately, protecting the public health."[2]

Despite Fauci's enthusiasm for it, the National Institutes of Health issued a moratorium on funding for gain-of-function research in 2014. Researchers involved in this type of work were urged to discontinue their activities until risks and benefits could be more clearly defined.[3] The October 17, 2014, document that announced the moratorium included these statements expressing concern about this type of research:

> "Gain-of-function studies, or research that improves the ability of a pathogen to cause disease, help define the fundamental nature of human-pathogen interactions, thereby enabling assessment of the pandemic potential of emerging infectious agents, informing public health and preparedness efforts, and furthering medical countermeasure development. Gain-of-function studies may entail biosafety and biosecurity risks; therefore, the risks and benefits of gain-of function research must be evaluated, both in the context of recent U.S. biosafety incidents and to keep pace with new technological developments, in order to determine which types of studies should go forward and under what conditions."
>
> "In light of recent concerns regarding biosafety and biosecurity, effective immediately, the U.S. Government (USG) will pause new USG funding for gain-of-function research on influenza, MERS or SARS viruses, as defined below. This research funding pause will be effective until a robust and broad deliberative process is completed that results in the adoption of a new USG gain-of-function research policy 1. Restrictions on new funding will apply as follows:"
>
> > "New USG funding will not be released for gain-of-function research projects that may be reasonably anticipated to confer attributes to influenza, MERS, or SARS viruses such that the virus would have enhanced pathogenicity and/or transmissibility in mammals via the respiratory route. The research funding pause would not apply to characterization or testing of naturally occurring influenza, MERS, and SARS viruses, unless the tests are reasonably anticipated to increase transmissibility and/or pathogenicity."

[2] Anthony S. Fauci, Gary J. Nabel and Francis S. Collins. A flu virus risk worth taking. *Washington Post* December 30 2011 https://www.washingtonpost.com/opinions/a-flu-virus-risk-worth-taking/2011/12/30/gIQAM9sNRP_story.html accessed 9.10.2022

[3] Akst J. "Moratorium on Gain-of-Function Research." *The Scientist* October 21 2014

> "In parallel, we will encourage the currently-funded USG and non-USG funded research community to join in adopting a voluntary pause on research that meets the stated definition."[4]

It is important to note that the moratorium applied to NEW rather than existing funding. Research funded in part by The National Institute of Allergy and Infectious Diseases through EcoHealth which we have termed "The SARS-CoV-2 Creation Project" was already underway at the time the moratorium was declared. Ralph Baric, who was conducting gain of function research conducted at the University of North Carolina Chapel Hill and in partnership with researchers from the Wuhan Institute of Virology petitioned the NIH biosecurity board for an exemption from the pause. It was subsequently granted.

What is a Chimeric Virus?

A chimera, or chimeric virus, is a virus that contains genetic material from two or more distinct viruses. Chimeric viruses have been considered as potential bioweapons due to the increased lethality that can result from combining two pathogens in a lab.[5] [6] [7]

[4] U.S. Government Gain-of-Function Deliberative Process and Research Funding Pause on Selected Gain-of-Function Research Involving Influenza, MERS and SARS Viruses. https://www.phe.gov/s3/dualuse/documents/gain-of-function.pdf accessed 9.10.2022

[5] Collett Marc. "Impact of Synthetic Genomics on the Threat of Bioterrorism with Viral Agents". *Working Papers for Synthetic Genomics: Risks and Benefits for Science and Society* 2006:83–103.

[6] Smithson A. "A Bio Nightmare." *Bulletin of the Atomic Scientists* 1999 Jul: https://journals.sagepub.com/doi/full/10.2968/055004019 accessed 9.9.2022

[7] Ainscough MJ. *Next Generation Bioweapons: Genetic Engineering and BW.* US Airforce Counterproliferation Center Future Warfare Series No. 14 https://media.defense.gov/2019/Apr/11/2002115480/-1/-1/0/14NEXTGENBIOWEAPONS.PDF accessed 9.9.2022

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The Wuhan Institute of Virology (WIV)

The Wuhan Institute of Virology (WIV) was originally founded in 1956 as the Wuhan Microbiology Laboratory. The Institute has operated under the jurisdiction of the Chinese Academy of Sciences since 1978. The Institute's labs range from Biosafety Level II (BSL-2) to Biosafety Level IV (BSL-4). BSL-4 labs are used for research with dangerous agents and substances.

The WIV BSL-4 LAB, which is of interest in the COVID-19 debacle, was developed by the People's Republic of China (PRC) in partnership with France following the 2003 SARS pandemic. Almost immediately after the project was undertaken, French officials expressed discomfort because it was suspected that the PRC had an ongoing biological warfare program, and the BSL-4 lab might be used for the purpose of developing biological weapons. To mitigate this concern, the parties agreed that all PRC/French research projects would be conducted under the supervision of French researchers on site at the lab. This did not, however, resolve the issue.

Disagreements between the parties continued. The French obtained information that led them to think that the PRC intended to build several BSL-4 labs. There were ongoing disputes over construction. After the Wuhan BSL-4 lab opened, the French became alarmed when the PRC requested biohazard suits that offered protection beyond what would have been necessary based on the research that should have been going on in the lab.

Of concern to everyone is the influence the Chinese Communist Party (CCP) had and continues to have on the Institute. High-level CCP officials serve on committees that decide the projects that will be undertaken in the lab and are also appointed to management positions.

Accidents at the lab have been another concern. For example, during a one-month period in 2004, the PRC reported nine new cases of SARS related to an accident during research using both live and inactivated samples of SARS-CoV.[8]

[8] The Origins of the COVID-19 Global Pandemic, Including the Roles of the Chinese Communist Party and the World Health Organization. House Foreign Affairs Committee Minority Staff Interim Report. June 12. 2020 https://gop-foreignaffairs.house.gov/wp-content/uploads/2020/08/Interim-Minority-Report-on-the-Origins-of-the-COVID-19-Global-Pandemic-Including-the-Roles-of-the-CCP-and-WHO-8.17.20.pdf accessed 9.10.2022

The Institute is headed by Dr. Shi Zheng-Li, who is known as China's "Bat Woman" because she has spent a significant portion of her career collecting and studying bat viruses, ostensibly to facilitate the development of effective vaccines.[9] Her colleagues include scientists and physicians who have close ties to both the political and military leadership of the PRC. An example is Guo Deyin, who has conducted research on AIDS and hepatitis vaccines, as well as genetic recombination methods.

[9] Jane Qiu "How China's 'Bat Woman' Hunted Down Viruses from SARS to the New Coronavirus." *Scientific American* June 1 2020 https://www.scientificamerican.com/article/how-chinas-bat-woman-hunted-down-viruses-from-sars-to-the-new-coronavirus1/ accessed 9.10.2022

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Dr. Shi's Research at WIV

In a 2010 paper, Shi and her colleagues reported the results of their research on angiotensin-converting enzyme II (ACE2) protein, which is a known SARS-CoV receptor. The group looked at ACE2 molecules from seven bat species and tested the interaction of the ACE2 receptor with the human SARS-CoV spike protein. They used HIV-based pseudo type and live SARS-CoV infection assays. Spike proteins are structures that allow coronaviruses to bind to the receptor sites on human cells.

The researchers found that the ACE2s of two bat species – *Myotis daubentoni* and *Rhinolophus sinicus* were susceptible to SARS-CoV and might be candidates as the natural host of the SARS-CoV progenitor viruses.[10]

Shi was also a member of the Chinese research team that was involved in the controversial gain-of-function research financed by the National Institute of Allergy and Infectious Diseases (headed by Anthony Fauci), The National Institute of Aging of the US National Institutes of Health, and EcoHealth Alliance (headed by Peter Daszak), and conducted in partnership with a research team (led by Ralph Baric) at the University of North Carolina Chapel Hill. In a paper published in 2015 in *Nature Medicine,* the group characterized a chimeric virus with the spike protein SHC014 that was able to use multiple genes of the SARS receptor human angiotensin-converting enzyme II (ACE2) and "replicate efficiently in primary human airway cells and achieve in vitro titers equivalent to epidemic strains of SARS-Cov." In other words, this virus could infect humans and quickly replicate. The article specifically stated, "…we synthetically re-derived an infectious full-length SHC014 recombinant virus and demonstrate robust viral replication both *in vitro* and *in vivo*."

Furthermore, the team also reported replication of the chimeric virus in the lungs of mice. Most important, therapies typically used to treat SARS patients were found to be ineffective for treating the chimeric virus and vaccines did not prevent "infection with CoVs using the novel spike protein."[11]

[10] Hou Y, Peng C, Yu M et al. "Angiotensin-converting enzyme 2 (ACE2) proteins of different bat species confer variable susceptibility to SATS-CoV entry." *Arch Virol* 2010 Oct;155(10):1563-1569
[11] Menachery VD, Yount BL, Debbink K et al. "A SARS-like cluster of circulating bat coronaviruses shows potential for human emergence." *Nat Med* 2015 Nov;21:1508-1513

Shi also conducted research on a virus called "WIV1" with clones of spike proteins and then tested the creation in humanized mice. The viruses quickly replicated, and the mice showed signs of severe pathogenesis. A peer-reviewed article reporting the results of this research listed Peter Daszak as an author.[12] What made this work especially risky was that WIV1 was already known to be potentially dangerous to humans. Baric had made this clear in an article titled "SARS-Like WIV1-CoV Poised for Human Emergence."[13]

The bottom line: Researchers at the Wuhan lab, in partnership with U.S. scientists and funded by the government (directly through the NIAH and NIAID and indirectly via grants to EcoHealth Alliance) were conducting research on bat viruses, admitted that they were successful on at least one occasion in developing one that could infect humans, and this virus seemed to be resistant to treatment and prevention with vaccines.

[12] Zeng LP, Gao YT, Ge XY et al. "Bat Severe Acute Respiratory Syndrome-Like Coronavirus WIV1 Encodes an Extra Accessory Protein, ORFX, Involved in Modulation of the Host Immune Response." *J Virol* 2016 Jun;90(14):6573-6582

[13] Menachery VD, Yount BL, Sims AC et al. "SARS-like W1V10CoV poised for human emergence." *PNAS* 2016 Mar;113(11):3048-3053

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The Government and the Scientific Community Already Knew That Gain of Function Research was a Problem

In 2012, Dutch scientist Ron Fouchier conducted gain-of-function experiments designed to make a highly lethal avian influenza virus, H5N1, more transmissible. After several attempts, the team was successful. Live ferrets were used and H5N1 acquired mutations resulting from serial passage in ferrets. The result: H5N1 was transmissible between mammals without requiring recombination in an intermediate host. And it was created in a lab.[14]

Government officials were alarmed, which led to the 2014 moratorium. Then-President Obama mandated that gain-of-function research involving influenza, SARS, and MERS be paused until a new regulatory framework could be developed. Ralph Baric, who was at the time conducting gain-of-function research in partnership with Shi Zhengli (from the Wuhan Institute), petitioned the NIH biosecurity board for an exemption from the pause. It was subsequently granted.

Meanwhile Shi's lab was unencumbered by any restrictions and gain-of-function research continued at the Wuhan Institute. She and her colleagues researched how spike proteins in both natural and chimeric SARS-like viruses bind to the ACE2 receptors in the cells of humans, bats, and animals.[15]

[14] Herfst S, Schrauwen EJA, Linster M et al. "Airborne Transmission of Influenza A/H5N1 Virus Between Ferrets." *Science* 2012 Jun;336(6088):1534-1541
[15] Ren W, Qu X, Wendong L et al. "Difference in Receptor Usage between Severe Acute Respiratory Syndrome (SARS) Coronavirus and SARS-Like Coronavirus of Bat Origin." *J Virol* 2008 Feb;82(4):1899-1907

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Government and Health Officials Were Also Aware That Labs in China Were Not Secure

In 2004, the World Health Organization voiced concerns about lab security, particularly Chinese labs. According to the WHO, a SARS outbreak in 2003 infected nine people, one of whom died. This was the third outbreak of SARS that had been traced to a lab, and the WHO indicated that a better containment policy might be necessary, as well as a reduction in the number of labs that handled SARS viruses.[16]

The Wuhan Lab was the first in China to achieve the highest level of international bioresearch containment (BSL-4), but it was well-known that security was lax. Two years before the SARS-CoV-2 debacle, U.S. Embassy officials visited the Wuhan Institute several times and sent two "Sensitive but unclassified" cables to Washington stating that safety in the lab was inadequate. One of them warned about the lab's experiments on bat viruses and the potential for human transmission and the risk of a SARS pandemic.[17]

[16] Parry J. "Breaches of safety regulations are probable cause of recent SARS outbreak, WHO says." *BMJ* 2004 May;328(7450):1222

[17] Josh Rogin. Opinion: State Department cables warned of safety issues at Wuhan lab studying bat coronaviruses. *Washington Post* April 14 2020 https://www.washingtonpost.com/opinions/2020/04/14/state-department-cables-warned-safety-issues-wuhan-lab-studying-bat-coronaviruses/ accessed 9.10.2022

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EcoHealth Alliance and Peter Daszak

EcoHealth Alliance, formerly Wildlife Trust, is a nonprofit organization that at one time focused on wildlife conservation and matters like habitat loss, pollution, and environmental issues. In 2010, the organization rebranded itself to focus on "global health," and the "relationships between ecosystems and animal and human health."[18]

EcoHealth Alliance currently lists many partners on its website. These include[19]:

- The Centers for Disease Control
- The National Institutes of Health
- UC Davis California
- University of Pittsburgh Public Health
- Columbia University
- Princeton University
- Johns Hopkins Bloomberg School of Public Health
- Johnson and Johnson

Many of these organizations have been very involved with and some have profited from the SARS-CoV-2 debacle. For example, Johnson and Johnson is the maker of one of the COVID-19 vaccines approved under the Emergency Use Authorization, and sales have totaled billions of dollars.[20]

During a several-year period of time starting in 2008, EcoHealth Alliance received funding from two U.S. government sources specifically related to Gain of Function Research:

The U.S. Agency for International Development (USAID) through a 5-year program called PREDICT.

[18] Entering its Fifth Decade, Wildlife Trust Re-Brands as EcoHealth Alliance. September 21 2020 https://www.ecohealthalliance.org/2010/09/entering-its-fifth-decade-wildlife-trust-re-brands-as-ecohealth-alliance

[19] https://www.ecohealthalliance.org/partners

[20] Spencer Kimball. J&J expects more than $3 billion in COVID vaccine sales this year in mixed quarterly report. *CNBC* Jan 25 2022

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National Institutes of Health and National Institute of Allergy and Infectious Diseases gave grants related to "Understanding the Risk of Bat Coronavirus Emergence."[21]

Here are just a few of the grant awards:

2008 NIH/NIAID Project number 1R01AI079231-01[22]
Risk of Viral Emergence from Bats
$534,989

2009 NIH/NIAID Project number 5R01AI079231-02[23]
Risk of Viral Emergence From Bats
$535,156

2010 NIH/NIAID Project number 5R01AI0799231-03[24]
Risk of Viral Emergence From Bats
$480,423

2011 NIH/NIAID Project number 5R01AI0179231-04[25]
Risk of Viral Emergence From Bats
$510,005

2012 NIH/NIAID Project Number 5R01AI0179231-05[26]
Risk of Viral Emergence From Bats
$518,980

For the period 2002 through 2021, EcoHealth Alliance received a total of $16,874,314 in grant money from NIH/NIAID.[27] Millions of dollars were allocated for researching bat viruses but

[21] https://www.usaspending.gov/award/ASST_NON_R01AI110964_7529
[22] https://reporter.nih.gov/search/CzU6U_tz2EG7c2LWkYMjLA/project-details/7509184
[23] https://reporter.nih.gov/search/CzU6U_tz2EG7c2LWkYMjLA/project-details/7688507 accessed 9.11.2022
[24] https://reporter.nih.gov/search/CzU6U_tz2EG7c2LWkYMjLA/project-details/7934526 accessed 9.11.2022
[25] https://reporter.nih.gov/search/CzU6U_tz2EG7c2LWkYMjLA/project-details/8142143 accessed 9.11.2022
[26] https://reporter.nih.gov/search/DSSafL8TgkmP49MquyvTDQ/project-details/8313666 accessed 9.11.2022
[27] https://reporter.nih.gov/search/Ho2wtHWeYEyi7P9MQUkUtQ/projects accessed 9.11.2022

NIH also provided several hundred thousand dollars for research on the Nipah virus,[28] which has a 40-70% lethality rate, according to the WHO.[29]

Some of this money received by EcoHealth – about six hundred thousand dollars – was given as a subgrant to the Wuhan Institute of Virology, in spite of the fact that security issues in Chinese labs and specifically at the Wuhan Institute were well-known.

Several hundred pages of emails obtained as a result of a lawsuit filed by the White Coat Waste Project reveal significant information about Daszak and his partners. In an email to NIAID, Daszak lists several "Senior/Key Personnel" involved in his projects including Ralph Baric at the University of North Carolina Chapel Hill, and Shi Zhengli along with several other scientists at the Wuhan Institute of Virology.[30]

These emails also discuss collecting viruses from bats in several countries including Laos.[31] Why is this significant? The emails show that it was decided to send samples to the Wuhan Institute of Virology.

Viruses isolated from the bats from Laos were genetically very close to SARS-CoV-2; the only thing missing was the furin cleavage site. But it defies logic that a bat virus that is almost identical to SARS-CoV-2 could have been transported to the Wuhan lab, where gain of function research was taking place, that the outbreak of SARS-CoV-2 took place in Wuhan, and that this could all be a coincidence.[32] [33] [34] This is particularly unlikely in view of a grant proposal submitted by EcoHealth to another U.S. government agency that specifically referred to the "furin cleavage sites."

In 2018, Daszak, at EcoHealth Alliance, in partnership with Shi, Baric, and Linfa Wang director of the Programme in Emerging Infectious Diseases at Duke-N.U.S. Medical School), submitted a $14.2-million grant proposal to the U.S. Defense Advanced Research Projects Agency

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[28] https://reporter.nih.gov/search/DSSafL8TgkmP49MquyvTDQ/project-details/8326099
[29] https://www.who.int/news-room/fact-sheets/detail/nipah-virus
[30] Gain of Function Communications Between EcoHealth Alliance and NIAID p 21-22
[31] Gain of Function Communications Between EcoHealth Alliance and NIAID. P 61
[32] White Coat Waste Project. From Laos to Wuhan: ECW FOIA Investigation Sheds Light on Pandemic's Origins. December 7 2021 https://blog.whitecoatwaste.org/2021/12/07/from-laos-to-wuhan-wcw-foia-investigation-sheds-light-on-pandemics-origins/ accessed 9.10.2022
[33] Matt Riley. The COVID lab leak theory just got even stronger. *The Spectator* November 20 2021
[34] Wuhan scientists were studying Laos bat viral samples before COVID-Report. *Business Standard* November 22 2021 https://www.business-standard.com/article/current-affairs/wuhan-scientists-were-studying-laos-bat-viral-samples-before-covid-report-121112201019_1.html accessed 9.10.2022

(DARPA).[35] This proposal was ultimately turned down. But the proposal included plans to insert "human-specific" furin cleavage sites into SARS-like coronaviruses, and then to test the altered viruses in human respiratory cells and humanized mice. The furin cleavage site is particularly important since it is the most distinguishing feature of SARS-CoV-2. It allows the virus to bind more efficiently and release genetic material into human cells. It is one of the reasons that SARS-CoV-2 transmits so easily from human to human and can be so harmful.

According to Richard Ebright, molecular biologist at Rutgers University, "The relevance of this is that SARS-CoV-2…is the only virus in its entire genus of SARS-related coronaviruses that contains a fully functional cleavage site at the S1, S2 junction. And here is a proposal from the beginning of 2018, proposing explicitly to engineer that sequence at that position in chimeric lab-generated coronaviruses."[36]

[35] https://www.documentcloud.org/documents/21066966-defuse-proposal accessed 9.10.2022
[36] Sharon Lerner, Maia Hibbet. Leaked Grant Proposal Details High Risk Coronavirus Research. *The Intercept* Sept 23, 2021 https://theintercept.com/2021/09/23/coronavirus-research-grant-darpa/ accessed 9.10.2022

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Could SARS-CoV-2 Have Come From an Animal?

It is possible, but not probable. SARS was found to have been transmitted from bats to civets and then to humans in November 2002.[37] It took about four months to make this determination.[38] MERS emerged in Saudi Arabia in 2012 spread from bats to camels to people.[39] It took about nine months to make this determination.[40] But almost three years after the first patients were identified, no animal has been identified as the source of SARS-CoV-2. At this time, such a discovery is not likely to occur. Authors of a World Health Organization report wrote in an August letter to *Nature*, "The window is rapidly closing on the biological feasibility of conducting the critical trace-back of people and animals inside and outside China." Daszak was a co-author of this letter.[41]

[37] Wang LF, Eaton BT. "Bats, civets and the emergence of SARS." *Curr Top Microl Immunol* 2007;315:325-344
[38] Guan Y, Zheng BJ, He YQ et al. "Isolation and characterization of viruses related to the SARS coronavirus from animals in southern China." *Science* 2003 Oct;302(5643):276-278
[39] Han HJ, Yu H, Yu XJ. "Evidence for zoonotic origins of Middle East Respiratory syndrome coronavirus." *J Gen Virol* 2016 Feb;97(2):274-7280
[40] Omrani AS, Al-Tawfiq JA, Memish ZA. "Middle east respiratory syndrome coronavirus (MERS-CoV): animal to human interaction." *Pathog Glob Health* 2015 Dec;109(8):354-362
[41] Koopmans M, Dszak P, Dedkov VG et al. "Origins of the SARS-CoV-2: window is closing for key scientific studies." *Nature* 2021 Aug https://www.nature.com/articles/d41586-021-02263-6?proof=t%29Nature accessed 9.10.2022

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Addressing the Myth That SARS-CoV-2 Originated at the Huanan Seafood Market

The first official announcement from the Chinese government concerning SARS-CoV-2 was issued on December 30, 2019, when the Wuhan Municipal Health Commission reported that "cases of pneumonia of unknown cause" were linked to the Huanan Seafood Market, which sold live wild animals in addition to seafood, including hedgehogs, badgers, snakes, and turtledoves. It was also stated there was no evidence of "obvious human to human transmission and no infection among medical personnel."[42]

Timeline for the Deception

On January 1, 2020, the Huanan Seafood Market was closed for cleaning. Vendors reported that workers had started spraying disinfectant on December 30, 2019.[43]

Scientists from China's National Institute for Viral Disease Control and Prevention collected 515 samples from the Huanan Seafood Market for analysis, also on January 1, 2020 and returned to collect 70 more samples from vendors after the market re-opened.

At the same time, an official at the Hubei Provincial Health Commission ordered gene sequencing companies and labs to stop testing and to destroy all patient samples.[44]

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[42] Zhang Jingshu and Wang Ruiwen Editor: Li Jie. Wuhan Central Hospital claims that SARS rumors spread through the internet, there is no doubt that the patient may be diagnosed. *Beijing News* 12.31.2019 http://www.bjnews.com.cn/news/2019/12/31/668421.html accessed 9.10.2022

[43] Seafood market closed after outbreak of 'unidentified' pneumonia. *Global Times* Jan 1 2020 https://www.globaltimes.cn/content/1175369.shtml accessed 9.10.2022

[44] The Origins of the COVID-19 Global Pandemic, Including the Roles of the Chinese Communist Party and the World Health Organization. House Foreign Affairs Committee Minority Staff Interim Report. June 12. 2020 https://gop-foreignaffairs.house.gov/wp-content/uploads/2020/08/Interim-Minority-Report-on-the-Origins-of-the-COVID-19-Global-Pandemic-Including-the-Roles-of-the-CCP-and-WHO-8.17.20.pdf accessed 9.10.2022

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On January 2, 2020 an analysis of samples from patients at Wuhan's Jinyintan Hospital by researchers at Wuhan Institute of Virology identified the novel coronavirus.[45]

On January 3, 2020 the Wuhan Municipal Commission reported that 44 patients had been identified with symptoms consistent with "pneumonia of unknown origin" some of whom worked at the Huanan Seafood Wholesale Market and 11 of whom were severely ill.[46]

On January 5 2020
A WHO statement was posted that included the following:

> "The reported link to a wholesale fish and live animal market could indicate an exposure link to animals. The symptoms reported among the patients are common to several respiratory diseases, and pneumonia is common in the winter season; however, the occurrence of 44 cases of pneumonia requiring hospitalization clustered in space and time should be handled prudently."[47]
>
> According to the authorities, some patients were operating dealers or vendors in the Huanan Seafood market. Based on the preliminary information from the Chinese investigation team, no evidence of significant human-to-human transmission and no health care worker infections have been reported.[48]

The WHO also posted this statement:

> The reported link to a wholesale fish and live animal market could indicate an exposure link to animals. The symptoms reported among the patients are common to several respiratory diseases, and pneumonia is common in the winter season; however, the occurrence of 44 cases of pneumonia requiring hospitalization clustered in space and time should be handled prudently.[49]

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[45] Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19) 16-24 Feb 2020 https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf accessed 9.10.2022
[46] Lu H, Stratton CW, Tang YW. "Outbreak of Pneumonia of Unknown Etiology in Wuhan China: The mystery and the miracle." *J Med Viro* 2020 Apr;92(4):401-402
[47] IBID
[48] World Health Organization. Pneumonia of unknown cause – China. World Health Organization https://www.who.int/csr/don/05-january-2020-pneumonia-of-unkown-cause-china/en/ accessed 9.10.2022
[49] IBID

In other words, the WHO was repeating the Chinese claim that the virus originated in the seafood market and gave the impression that there was no reason for concern.

January 12, 2020
WHO issued this statement: "China shared the genetic sequence of the novel coronavirus on 12 January, which will be of great importance for other countries to use in developing specific diagnostic tests." WHO also stated, "The evidence is highly suggestive that the outbreak is associated with exposures in one seafood market in Wuhan. The market was closed on 1 January 2020. At this stage, there is no infection among healthcare workers, and no clear evidence of human-to-human transmission."[50]

January 14, 2020
WHO tweets, "Preliminary investigations conducted by the Chinese authorities have found no clear evidence of human-to-human transmission of the novel #coronavirus (2019-nCov) identified in #Wuhan, #China."[51]

January 26, 2020
The Institute of Virology and Chinese CDC announced that the novel coronavirus was present in 33 of the 585 environmental samples collected from the Wuhan Huanan Seafood Wholesale Market earlier in the month. Of these 33 samples, all but two were collected from an area of the market where wildlife vendors were located. Xinhua News Service says the results indicate "the virus stems from wild animals on sale at the market."[52]

Almost immediately, however, published research showed that the market could not have been the source of the outbreak. The co-authors of an article published in the *Lancet*, including experts from Wuhan's leading infectious disease hospital, reported that among the first 41 patients identified in Wuhan, the first patient to show symptoms, on December 1, 2019, had no exposure to the market. Two of the next three patients to show symptoms, all on December 10, also had no exposure to the market. “No epidemiological link was found between the first patient and later cases,” the researchers wrote. And, in fact, there were 13 patients with no link to the market.[53]

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[50] Novel Coronavirus—China. World Health Organization. January 12, 2020 https://www.who.int/emergencies/disease-outbreak-news/item/2020-DON233 accessed 9.10.2022
[51] https://twitter.com/WHO/status/1217043229427761152 accessed 9.10.2022
[52] China Detects Large Quantity of Novel Coronavirus at Wuhan Seafood Market. *XinhuaNet* January 27, 2020 http://www.xinhuanet.com/english/2020-01/27/c_138735677.htm accessed 9.10.2022
[53] Huang C, Wang Y, Li X et al. "Clinical Features of Patients Infected with 2019 Novel Coronavirus in Wuhan, China." *Lancet,* 2020 Feb;395(10223):P497-506

"That's a big number, 13, with no link," stated Daniel Lucey, an infectious disease specialist at Georgetown University, who went on to say that the *Lancet* paper raised questions about the overall accuracy of the data the CCP was providing to the world.

According to Lucey, the Wuhan Municipal Health Commission was the "official source" of public information and on January 11, 2020, reported that there were only 41 confirmed patients, that there was no evidence of human-to-human transmission, and that most cases were related to the market. Because the Wuhan Municipal Health Commission noted that diagnostic tests had confirmed these 41 cases by January 10, 2020, and officials presumably knew the case histories of each patient, Lucey said "China must have realized the epidemic did not originate in that Wuhan Huanan seafood market."[54]

An article published in the *Lancet* on January 30, 2020 reported that of 99 patients diagnosed with COVID-19 between Jan 1 and Jan 20, 2020, forty-nine had been exposed to the Huanan Seafood Market, and 50 had not.[55] And an article in the *New England Journal of Medicine* reported that of 425 confirmed cases, the majority (55%) with onset before January 1, 2020 were linked to seafood market, although this was true for only 8.6% of subsequent cases.[56] The theory that the seafood market was the source of the outbreak and that the virus was not transmissible between humans was falling apart.

It is important to note that the First National Health Commission arrived in Wuhan December 31, 2019, and determined that in order to diagnose SARS-CoV-2, three criteria needed to be met: a history of exposure to the seafood market, fever, and the full genome from respiratory or serum specimens identical to SARS-CoV-2 sequences.[57]

The timeline above, however, indicates that the Chinese knew that one third had no contact with the seafood market when these criteria were established. So why were these criteria established? To mislead the world about the origin of the virus? The criteria were not changed until January 18, 2020, but on January 26, 2020, Chinese authorities were still claiming that the virus originated at the seafood market.

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[54] Jon Cohen. Wuhan seafood market may not be source of novel virus spreading globally. *Science* Jan 26 2020 https://www.sciencemag.org/news/2020/01/wuhan-seafood-market-may-not-be-source-novel-virus-spreading-globally accessed 9.10.2022

[55] Chen N, Zhou M, Dong X, Qu J, Gong F, Han Y. "Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: a descriptive study." *Lancet* 2020 Feb;395(10223):P507-513

[56] Li Q, Med M, Guan X et al. "Early Transmission Dynamics in Wuhan, China, of Novel Coronavirus-Infected Pneumonia." *NEJM* 2020 Mar;382:1199-1207

[57] Han Y, Yang H. "The transmission and diagnosis of 2019 novel coronavirus infection disease (COVID-19): A Chinese perspective." *J Med Virol* 2020 Mar;92:639-644

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So where *did* this virus originate?

A sample of bronchoalveolar fluid from a single patient hospitalized on December 26, 2019, identified a new RNA virus strain most closely related (89.1% nucleotide similarity) to a group of SARS-like coronaviruses previously found in bats in China. The researchers noted that although SARS-like viruses have been identified widely in bats in China, viruses identical to SARS-CoV had not yet been documented. They noted that the Wuhan coronavirus was most closely related to bat coronaviruses and showed 100% amino acid similarity to bat SL-CoVZC45 in the nsp7 and E proteins. [58] **The problem is that there were no bats at the seafood market, which means that the virus could not have originated there.**

In a paper published in the *Lancet,* researchers wrote, "Notably, 2019-nCoV was closely related (with 88% identity) to two bat-derived severe acute respiratory syndrome (SARS)-like coronaviruses, bat-SL-CoVZC45 and bat-SL-CoVZXC21, collected in 2018 in Zhoushan, in eastern China."[59] The researchers were referring to a 2018 paper which reported the results of an analysis of **334 bats collected between 2015 and 2017 from Zhoushan City in Zhejiang province China. Coronaviruses were detected in 26.65% of these bats**, and the viruses **had 81% shared nucleotide identity with human/civet SARS-CoVs.[60] This sounds complicated, and it is, but what this means is that the Wuhan virus was very similar to bat viruses. Yet there were no bats at the seafood market. Also remember that "the bat lady" – Shi - had been studying bat viruses at the WIV for an exceptionally long time.**

Again, the CCP was not forthcoming. The Shanghai lab where researchers published the first genome sequence of the coronavirus that caused COVID-19 was shut down by the Shanghai Health Commission for "rectification" on January 12, 2020, five days after Professor Yong-Zhen Zhang's **team published the genome sequence and made it available to the public. The team had reported that the virus resembled a group of viruses previously found in bats. This lab was a Level 3 biosafety facility and had just passed its annual inspection on January 5, 2020.[61]**

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[58] Wu F, Zhao S, Yu B et al. "A new coronavirus associated with human respiratory disease in China." *Nature* 2020 Feb;579:265-269

[59] Lu R, Zhao X, Li J et al. "Genomic characterization and epidemiology of 2019 novel coronavirus: implications for virus origins and receptor binding." *Lancet* 2020 Feb;395:565-574

[60] Hu D, Zhu C, Ai L et al. "Genomic characterization and infectivity of a novel SARS-like coronavirus in Chinese bats." *Emerg Microbes Infect* 2018 Sep;7:154

[61] Zhuang Pinghui "Chinese laboratory that first shared coronavirus genome with world ordered to close for 'rectification', hindering its Covid-19 research." *South China Morning Post* Feb 28 2020 https://www.scmp.com/news/china/society/article/3052966/chinese-laboratory-first-shared-coronavirus-genome-world-ordered accessed 9.10.2022

Indian researchers also studied the virus and found four insertions in the spike protein that are unique to SARS-CoV-2 and not present in other coronaviruses. The amino acid residues in all four insertions were found to be similar to amino acid residues in the structural proteins of HIV-1. The researchers noted that there are only 3 viruses that contain these sequences – HIV-1, the bat coronaviruses discovered by Shi, and the New Wuhan virus (COVID-19). They also noted that it was highly unlikely that this could have occurred naturally.[62]

This article was later withdrawn. The Indian researchers wrote that they intended to revise it in response to comments received from the research community.[63] Almost a year later, Ashutosh Kumar Pandey, one of the researchers, told a reporter that the article was inconvenient for those who wanted to promote the natural origin theory. He stated that the paper was withdrawn due to pressure from "people with vested interests."

Pandey also said that the original paper represented a small portion of the studies that he and his group had conducted. When they tried to include their entire findings in a new article, the revised manuscript was blocked by journal publishers. When asked how it was possible for scientific papers to be blocked to comply with a particular agenda, he replied, "Science is the new medieval church, those who are popes of it censor at their will."[64]

Notes from a lecture delivered by Shi shortly before the outbreak began disappeared from the Institute website.

The CCP's order to labs to destroy samples, and its refusal to share information and samples to the world community has not helped to instill confidence in the integrity of Chinese officials and their representations concerning the virus.

Bottom Line: What we now call SARS-CoV-2 is almost identical to viruses obtained from bats in Laos and shares important characteristics with chimeric viruses created via gain-of-function research. There is almost no evidence to support the idea that this virus was transmitted directly from bats or other animals to humans, or that the original patients were infected at the wet market.

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[62] Pradhan P, Pandley AK, Mishra A et al. "Uncanny similarity of unique inserts in the 2019-nCoV spike protein to HIV-1 gp120 and Gag." *BioRxiv* https://doi.org/10.1101/2020.01.30.927871

[63] IBID

[64] COVID-19 lab leak theory: Indian scientists had flagged 'unnatural insertions' in its genome, were forced to withdraw study. *OpIndia* June 4 2021 https://www.opindia.com/2021/06/indian-scientists-had-found-unique-insertions-in-covid-19-virus-genome/ accessed 9.10.2022

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Conclusion: The Creation of SARS CoV-2 Was Funded by NIH, NIAID, and EcoHealth Alliance and Took Place in a Lab

A comparison between a virus created in a lab, and described in a paper published in *Nature Medicine* reveals startling similarities to SARS-CoV-2:[65]

- Younger mice were relatively unaffected.
- The virus was deadly to older mice or mice with compromised immune systems.
- Showed strong tendency to attack lung tissue, invade human bronchial epithelial cells.
- Caused weight loss in mice, a common side effect of SARS-CoV-2 in humans.
- Resistant to standard treatment.
- Researchers were unable to develop an effective vaccine.
- When a vaccine made of "inactivated whole SARS-CoV" was given to older animals they became sicker when re-exposed to SARS-CoV.
- Older animals vaccinated and then exposed: "augmented immune pathology was also observed, indicating the possibility of the animals being harmed because of the vaccination."
- Exaggerated immune response after vaccination and re-exposure.

According to the article, this work was funded by EcoHealth Alliance, The National Institute of Allergy and Infectious Diseases (NIAID), and The National Institutes of Health. The authors of the paper included Zhengli-Li Shi (from the Wuhan Institute), Ralph Baric (UNCH) and Peter Daszak (EcoHealth Alliance).

Another clue as to the origin of SARS-CoV-2 comes from an interview with Daszak conducted by virologist Vincent Racaniello on December 19, 2019, just three weeks before the Wuhan Municipal Health Commission reported the first cases of what turned out to be COVID-19:

[65] Menachery VD, Yount BL, Debbink K et al. "A SARS-like cluster of circulating bat coronaviruses shows potential for human emergence." *Nat Med* 2015 Nov;21:1508-1513

At the 28:10 mark of the podcast interview, Daszak states that researchers found that SARS likely originated from bats and then set out to find more SARS-related coronaviruses, eventually finding over one hundred of them.

Daszak reported that some coronaviruses can "get into human cells in the lab," and others can cause SARS disease in "humanized mouse models."

He warned that such coronaviruses are "untreatable with therapeutic monoclonals [antibodies] and you can't vaccinate against them with a vaccine."

Daszak claimed that his team's goal was trying to find the next "spillover event" that could cause the next pandemic.

At the 29:54-mark Daszak is asked what can be done to deal with coronaviruses given that there are no therapeutics or vaccines for them, Daszak discusses that the goal of his GoF (gain-of-function) research was to develop a universal vaccine that could be used for many different types of coronaviruses.

Referring specifically to bat coronaviruses, Daszak said, "You can manipulate them in the lab pretty easily." He then mentioned the most unique characteristic of SARS-CoV-2 (which had not yet been named at the time of this podcast), the spike protein, stating "Spike protein drives a lot of what happens with the coronavirus, zoonotic risk." He also talked about inserting the spike protein "into a backbone of another virus" and then doing "some work in the lab."

Daszak acknowledged collaboration with Baric: "and we work with Ralph Baric at UNC [University of North Carolina] to do this."

Daszak also admitted the creation of chimeras in order to investigate vaccines: "Now, the logical progression for vaccines is, if you are going to develop a vaccine for SARS, people are going to use pandemic SARS, but let's try to insert these other related diseases and get a better vaccine."[66]

Evidence also shows that SARS-CoV-2 is likely not only manmade but may have been developed in collaboration with other entities.

[66] Keoni Everington. WHO inspector caught on camera revealing coronavirus manipulation in Wuhan before pandemic. *Taiwan News* Jan 18 2021 https://www.taiwannews.com.tw/en/news/4104828 accessed 9.10.2022

BLAST is an acronym for Basic Local Alignment Search Tool. It's a computer algorithm available for use at the National Center for Biotechnology Information (NCBI) website. The algorithm allows scientists to quickly query a DNA sequence to find matches or regions of similarity between protein sequences. Scientists worldwide deposit their sequences when they make new discoveries.

A distinguishing feature of SARS-CoV-2 is the furin cleavage site and the 12- nucleotide insertion in the spike protein, particularly its two consecutive CGG codons. Researchers conducted a BLAST search and found a 100% reverse match in a proprietary U.S. patent filed on February 4, 2016 (US patent 9,587,003).[67] According to the researchers, statistical analysis shows that the probability of this sequence randomly being present in a 30,000-nucleotide viral genome is 3.21×10^{-11} (less than one in one billion). The owner of the patent is Moderna, which makes COVID-19 vaccines using mRNA technology.[68]

While nothing is impossible, a SARS virus mutating in nature and jumping species that contains a furin cleavage site that does not exist in nature but does exist in a Moderna patent – not at all likely. The authors write, "The presence in SARS-CoV-2 of a 19-nucleotide sequence encoding an FCS at amino acid 681 of its spike protein with 100% identity to the reverse complement of a proprietary MSH3 mRNA sequence is highly unusual. Potential explanations for this correlation should be further investigated."[69]

[67] Bancel S, Chakraborty T, De Fougerolles A, Elbashir SM, John M, Roy A, et al. *Modified Polynucleotides for the Production of Oncology-Related Proteins and Peptides*. Cambridge, MA: United States Patent. (2016). https://pubchem.ncbi.nlm.nih.gov/patent/US-9587003-B2 accessed 9.10.2022

[68] Ambati BK, Varshney A, Lundstrom K et al. "MSH3 Homology and Potential Recombination Link to SARS-CoV-2 Furin Cleavage Site." *Frontiers Virol* 2022 Feb; https://doi.org/10.3389/fviro.2022.834808 accessed 9.10.2022

[69] IBID

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The Cover-Up

Peter Daszak, Anthony Fauci, and many others have invested considerable effort in trying to convince the public and the scientific community that the lab origin theory is false.

In February 2020, Daszak organized scientists to write an open letter published in the *Lancet* that included these statements: "The rapid, open, and transparent sharing of data on this outbreak is now being threatened by rumours and misinformation around its origins. We stand together to strongly condemn conspiracy theories suggesting that COVID-19 does not have a natural origin."[70]

Daszak was one of the authors. But prior to signing on, he expressed concern about distancing himself to hide his participation in gain-of-function research. In an email obtained through a Freedom of Information Act request, Daszak wrote to collaborator Ralph Baric: "I spoke with Linfa [Wang] last night about the statement we sent round. He thinks, and I agree with him, that you, me, and him should not sign this statement, so it has some distance from us and therefore doesn't work in a counterproductive way. We'll then put it out in a way that doesn't link it back to our collaboration so we maximize an independent voice."[71]

Baric agreed, writing back, "I also think this is a good decision. Otherwise it looks self-serving and we lose impact."[72]

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[70] Calisher C, Carroll D, Colwell R et al. "Statement in support of the scientists, public health professionals, and medical professionals of China combatting COVID-19." *The Lancet* 2020 Mar;395(10226):E42-E43

[71] Emails show scientists discussed masking their involvement in key journal letter on COVID origins. US Right to Know Feb 15 2021 https://usrtk.org/biohazards-blog/scientists-masked-involvement-in-lancet-letter-on-covid-origin/ accessed 9.10.2022

[72] IBID

The letter included this statement: "We declare no competing interests."[73] Daszak also told the *Washington Post* that he had no conflicts of interest concerning his work with Shi Zhengli at the Wuhan Institute of Virology.[74]

Daszak further tried to cover his tracks when he agreed to be part of a team sent to China by the World Health Organization in February 2021 to investigate the origin of SARS-CoV-2. Not surprisingly, the team reported that it was "extremely unlikely" that the virus has been released from a lab.[75] Team members were asked to sign a declaration of interest and according to the report, "All declared interests were assessed and found not to interfere with the independence and transparency of the work."[76] It is difficult to believe that Dasak could have disclosed his connection to the Wuhan Institute and gain-of-function research and met the criteria for "independence and transparency."

Daszak also hid his conflicts of interest concerning his research and his ties to the Wuhan Institute of Virology from Jeffrey Sachs, chair of the *Lancet* COVID-19 Commission. Daszak had been asked by Sachs to head a Task Force to look into the origins of COVID-19. According to Sachs, "It is clear that the NIH co-funded research at the Wuhan Institute of Virology that deserves scrutiny under the hypothesis of a laboratory-related release of the virus."[77] Sachs ended the task force's work after more information became public that questioned the veracity of statements made by Daszak.[78]

Daszak's collaborators are equally evasive. According to David Morens, Daszak's work benefits humanity and we should all be grateful."[79] But Morens is with the National Institute

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[73] Calisher C, Carroll D, Colwell R et al. "Statement in support of the scientists, public health professionals, and medical professionals of China combatting COVID-19." *The Lancet* 2020 Mar;395(10226):E42-E43

[74] Josh Rogin. Opinion: the coronavirus shows he risks of scientific collaboration with China. *Washington Post* Apr 23 2020 https://www.washingtonpost.com/opinions/global-opinions/the-coronavirus-crisis-shows-the-risks-of-scientific-collaboration-with-china/2020/04/23/4ccd5850-85a8-11ea-878a-86477a724bdb_story.html accessed 9.10.2022

[75] WHO-convened Global Study of the Origins of SARS-CoV-2: China Part. file:///C:/Users/Pam/Downloads/Final-joint-report_origins-studies-6-April-201%20(2).pdf accessed 9.10.2022

[76] IBID p 12

[77] Jeffrey Sachs. Finding the Origins of the COVID-19 and Preventing Future Pandemics. https://www.jeffsachs.org/newspaper-articles/cp24mtcpswgyty5st4pm29mwh6dt2d accessed 9.10.2022

[78] COVID-19: *Lancet* investigation into origin of pandemic shuts down over bias risk. *BMJ* 2021;375:n2414

[79] Jon Cohen. Prophet in Purgatory. *Science* November 17 2021

of Allergy and Infectious Diseases, which provides grant money to Daszak, and he co-authors articles defending the idea that SARS-CoV-2 came from nature.[80]

Yet more evidence of a cover-up is described in email exchanges between Anthony Fauci, head of the National Institute of Allergy and Infectious Diseases, other NIH personnel and outside researchers.

On January 31, 2020, Fauci received an email from Greg Folkers of the National Institutes of Health.[81] The email included no text, but an article published in *Science* was attached.[82] This article reported that scientists were sharing and reviewing a growing number of genetic sequences of the virus obtained from infected patients. These had been posted in the Global Initiative on Sharing All Influenza Data database.[83] The author reported that there was some doubt as to whether the virus originated in the wet market, which was the story promoted by U.S. and Chinese authorities at the time. The author also reported that many scientists had been expressing concerns for many years about experiments conducted at the Wuhan Institute and cited the gain-of-function research fully described in the above-mentioned article in *Nature Medicine* in 2015.[84] This article included a disclosure that the research was funded by the National Institute of Allergy and Infectious Diseases (NIAID), the division of the NIH headed by Fauci, along with the NIH and EcoHealth.

Within minutes, Fauci forwarded the *Science* article to Jeremy Farrar, the head of Wellcome Trust, a UK non-profit, and Kristian Andersen with Scripps Research Institute.[85] He later sent the article to Robert Kadlec at the Health and Human Services Office of the Assistant Secretary for Preparedness and Response.[86]

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[80] Morens D, Daszak P, Markel H, Taubenberger JK. "Pandemic COVID-19 Joins History's Pandemic Legion." *mBio* 2020 May;11(3):e00812-20
[81] https://assets.documentcloud.org/documents/20793561/leopold-nih-foia-anthony-fauci-emails.pdf p3229 accessed 9.10.2022
[82] Jon Cohen. Mining coronavirus genomes for clues to the outbreak's origins. *Science* Jan 31 2020
[83] https://gisaid.org/database-features/flusurver-mutations-app/ accessed 9.10.2022
[84] Menachery VD, Yount BL, Debbink K et al. "A SARS-like cluster of circulating bat coronaviruses shows great potential for human emergence." *Nature Medicine* 2015 Nov;21:1508-1513
[85] https://assets.documentcloud.org/documents/20793561/leopold-nih-foia-anthony-fauci-emails.pdf p3187 accessed 9.10.2022
[86] https://assets.documentcloud.org/documents/20793561/leopold-nih-foia-anthony-fauci-emails.pdf p3222 accessed 9.10.2022

On the same day, Kristian Anderson wrote in an email to Fauci: "The unusual features of the virus make up a really small part of the genome (<0.1%) so one has to look really closely at all the sequences to see that some of the features (potentially) look engineered."[87]

The next day on February 1 2020, Fauci sent an email to Hugh Auchincloss, deputy director of NIAID.[88] **The subject line was IMPORTANT (in all caps) and read: "It is essential that we speak this AM. Keep your cell phone on…Read this paper as well as the email that I will forward to you now. You will have tasks today that must be done."**
Attached to the second email was a document titled "Baric, Shi et al – Nature Medicine – SARS Gain of Function.pdf." This is particularly important since Fauci denied under oath in front of a Senate hearing that Ralph Baric was conducting gain-of-function research at the University of North Carolina. Within a few seconds, Fauci forwarded the article from *Science*[89] to Auchincloss as well.[90] He then forwarded the *Nature Medicine* article to Lawrence Tabak at the National Institutes of Health with "IMPORTANT" in the memo.[91]

It seems that Fauci was concerned and was alerting his colleagues that disclosure of this information might be a problem. The others seemed equally concerned. Farrar sent an email at 10:34AM announcing that he had scheduled a conference call and wrote that his expectation was that "information and discussion is shared in total confidence and not to be shared until agreement on next steps."[92]

Auchincloss then wrote to Fauci, "The paper you sent me says the experiments were performed before the gain of function pause but have since been reviewed and approved by NIH. Not sure what that means since Emily is sure that no Coronavirus work has gone through the P3 framework. She will try to determine if we have any distant ties to this work abroad."[93] Fauci replied, "OK. Stay tuned."[94]

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[87] https://assets.documentcloud.org/documents/20793561/leopold-nih-foia-anthony-fauci-emails.pdf p 3187 accessed 9.10.2022
[88] https://assets.documentcloud.org/documents/20793561/leopold-nih-foia-anthony-fauci-emails.pdf p 3221 accessed 9.10.2022
[89] Jon Cohen. Mining coronavirus genomes for clues to the outbreak's origins. *Science* Jan 31 2020
[90] https://assets.documentcloud.org/documents/20793561/leopold-nih-foia-anthony-fauci-emails.pdf p 3215 accessed 9.10.2022
[91] https://assets.documentcloud.org/documents/20793561/leopold-nih-foia-anthony-fauci-emails.pdf p3210 accessed 9.10.2022
[92] https://assets.documentcloud.org/documents/20793561/leopold-nih-foia-anthony-fauci-emails.pdf p3197 accessed 9.10.2022
[93] https://assets.documentcloud.org/documents/20793561/leopold-nih-foia-anthony-fauci-emails.pdf p3206 accessed 9.10.2022
[94] https://assets.documentcloud.org/documents/20793561/leopold-nih-foia-anthony-fauci-emails.pdf p3206 accessed 9.10.2022

During the conference call, Farrar sent an email to four of the people on the call, including Fauci, that read, "Can I suggest we shut down the call and then redial in? Just for 5-10 minutes?"[95]

There are several follow-up emails between the parties but the most important are those that discuss the need to talk to World Health Organization Director-General Tedros. An email of particular interest is from Farrar to Fauci and NIH Director Collins, which was shared with others: "Tedros and Bernhard have apparently gone into conclave … they need to decide today in my view. If they do prevaricate, I would appreciate a call with you later tonight or tomorrow to think how we might take forward [sic]."[96] In this email, Farrar expressed concern about an article published by ZeroHedge which discussed the potential lab release as the origin of the virus.[97] Subsequently ZeroHedge was banned from Twitter.

On February 3 2021, Tedros delivered a Report of the Director-General, 146th Meeting of the Executive Board, during which he emphasized the importance of controlling the spread of misinformation and announced that WHO was working with Google **"to make sure people searching for information about coronavirus see WHO information at the top of their search results. Social media platforms including Twitter, Facebook, Tencent and Tiktok have also taken steps to limit the spread of misinformation."[98] The proper term to describe this might be "censorship."**

In March 2020, a statement of support for the idea that SARS-CoV-2 was transmitted from an animal to a human was published in the *Lancet*.[99] It was signed by many people including Peter Daszak, President of EcoHealth Alliance and Christian Drosten. Then things start to get very interesting.

EcoHealth Alliance is the organization that received money from NIAID and distributed it to Ralph Baric at the University of North Carolina Chapel Hill, and Shi Zhengli, a virologist

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[95] https://assets.documentcloud.org/documents/20793561/leopold-nih-foia-anthony-fauci-emails.pdf p 3172 accessed 9.10.2022

[96] [96] https://assets.documentcloud.org/documents/20793561/leopold-nih-foia-anthony-fauci-emails.pdf p3125 accessed 9.10.2022

[97] Tyler Durden. Coronavirus Contains "HIV Insertions", Stoking Fears Over Artificially Created Bioweapon. *ZeroHedge* Feb 1 2020

[98] Report of the Director-General, 146th Meeting of the Executive Board. https://www.who.int/director-general/speeches/detail/report-of-the-director-general-146th-meeting-of-the-executive-board accessed 9.10.2022

[99] Calisher C, Carroll D, Colwell R et al. "Statement in support of the scientists, public health professionals, and medical professionals of China combatting COVID-19." *Lancet* 2020 Mar;395(10226):E42-E43

referred to as the "bat lady" at the Wuhan Institute of Virology. The money was earmarked for gain-of-function research. Emails obtained by U.S. Right to Know show that the "statement of solidarity" that appeared in the *Lancet* was actually drafted by Peter Daszak.[100]

Apparently, Ralph Baric was shown drafts of Daszak's letter but was informed by Daszak that he did not need to sign the statement. Baric agreed, stating that doing so would appear to be self-serving. Daszak wrote that other key people would be looking at the letter and that it would be "…put out in a way that doesn't link it back to our collaboration so we maximize an independent voice."[101] Daszak also wrote, "Please note that this statement will not have EcoHealth Alliance logo on it and will not be identifiable as coming from any one organization or person, the idea is to have this as a community supporting our colleagues."[102] This shows deliberate intent to hide the relationships between the parties. Indeed, five of the signers of this "solidarity statement" were directly affiliated with EcoHealth Alliance[103] and two were partners of EcoHealth.[104]

Christian Drosten is another signer of the solidary statement. He also has an interesting background. Drosten and his colleagues had published an article in *Eurosurveillance* on Jan 23, 2020, in which they claimed to have developed a RT-PCR test for SARS-CoV-2.[105] There were several problems with this paper, including the fact that that this group did not have SARS-CoV-2 viral material at the time that the article was published. The researchers acknowledged this, writing: "We aimed to develop and deploy robust diagnostic methodology for use in public health laboratory settings without having virus material available."[106] Instead, the group relied on theoretical sequences which were provided by a lab in China. Despite this, the test was immediately endorsed by World Health Organization Director General Tedros Adhanom. A large group of scientists has called for this paper to be retracted for many reasons, including undisclosed conflicts of interest for some of the authors and lack of peer review.[107]

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[100] https://usrtk.org/wp-content/uploads/2020/11/Biohazard_FOIA_Maryland_Emails_11.6.20.pdf accessed 9.10.2022
[101] https://usrtk.org/wp-content/uploads/2021/02/Baric_Daszak_email.pdf p 273 accessed 9.10.2022
[102] https://usrtk.org/wp-content/uploads/2021/02/Baric_Daszak_email.pdf p 274 accessed 9.10.2022
[103] Sainath Suryanarayanan. EcoHealth Alliance orchestrated key scientists statement on "natural origin" of SARS-CoV-2. *USRTK* Nov 18 2020 https://usrtk.org/biohazards-blog/ecohealth-alliance-orchestrated-key-scientists-statement-on-natural-origin-of-sars-cov-2/ accessed 9.10.2022
[104] https://www.ecohealthalliance.org/partners
[105] Corman VM, Landt O, Kaiser M et al. "Detection of 2019 novel coronavirus (2019-nCoV) by real-time RT-PCR." *Euro Surveill* 2020 Jan;25(3):2000045
[106] IBID
[107] Borger P, Malhotra BR, Yeadon M et al. "External peer review of the RTPCR test t detect SARS-CoV-2 reveals 10 major scientific flaws at the molecular and methodological level: consequences for false positive results." Corman-Drosten Review Report. November 27 2020 https://cormandrostenreview.com/report/ accessed 9.10.2022

The bottom line: both Daszak and Drosten had significant motivation to keep the actual origin of the virus, their knowledge about it, and other details a secret; as did Fauci and other employees of the NIH and NIAID.

Kristian Andersen, who had, in late January, written to Fauci expressing his concerns that SARS-Co-V-2 included sequences that appeared to be manmade, led a group that published an article in *Nature* on March 17, 2020, in support of the theory that the virus was transmitted from animals to humans.[108] After this, Andersen received a generous grant from the National Institutes of Health. At this time, we have no way of knowing if this was a form of quid pro quo, but it can at least be said that this does not pass the "smell test."

Dr. Anthony Fauci continued to insist that gain-of-function research was not responsible for the creation of SARS-CoV-2 and stated under oath when testifying in front of a Senate Committee that neither his agency nor the National Institute of Health funded gain-of-function research. In response to questions from Senator Rand Paul he said, "With all due respect, you are entirely, completely incorrect." He added that the NIH "…has not and does not now fund gain-of-function research in the Wuhan Institute of Virology."[109]

But The National Institutes of Health admitted that it funded gain-of-function research on bat coronaviruses at the Wuhan Institute in China. In a letter to Rep James Comer (R-KY), NIH Deputy Director Lawrence Tabak stated that the NIH had given a grant to EcoHealth Alliance Inc which then awarded a subgrant to the Wuhan Institute of Virology, and that EcoHealth had failed to submit reports as required under the terms of the grant. In this letter, Tabak stated that EcoHealth's "limited experiment" looked at whether spike proteins from naturally occurring bat viruses circulating in China were capable of binding to the ACE2 receptor in a mouse model. Tabak stated that mice infected with the modified virus became sicker than those who were infected with the unmodified virus. Tabak also wrote, "As sometimes occurs in science, this was an unexpected result of the research, as opposed to something that the researchers set out to do."[110]

A letter dated Oct 27, 2021, from Congressional leaders to Frances Collins, (former) Director of the National Institutes of Health, concerned inadequate oversight of grants made from NIH to

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[108] Andersen KG, Rambaut A, Lipkin WI, Holmes EC, Garry RF. "The proximal origin of SARS-CoV-2." *Nature Medicine* 2020 Mar;26:450-452

[109] Jack Brewster. Fauci and Sen Rand Paul Spar Over Wuhan Lab Research and COVID-19 Origin. *Forbes* May 11 2021 https://www.forbes.com/sites/jackbrewster/2021/05/11/fauci-and-sen-rand-paul-spar-over-wuhan-lab-research-and-covid-19-origin/?sh=5169857e1df9 accessed 9.10.2022

[110] Emily Crane. NIH admits US funded gain-of-function in Wuhan – despite Fauci's denials. *New York Post* Oct 21 2021 https://nypost.com/2021/10/21/nih-admits-us-funded-gain-of-function-in-wuhan-despite-faucis-repeated-denials/ accessed 9.10.2022

EcoHealth Alliance. Some of these concerns arose from a bipartisan "in camera" review of documents conducted at the Department of Health and Human Services (DHHS). The documents were examined in chambers because the NIH refused to make the documents public.

Here are excerpts from this letter to Dr. Collins:

> NIH terminated an EcoHealth Alliance grant in April 2020, reinstated the grant and then suspended the grant in July 2020 due to EcoHealth's inadequate oversight of research at the Wuhan Institute of Virology.
>
> EcoHealth Alliance refused to provide information to the NIH related to its subaward to the Wuhan Institute of Virology.
>
> > NIH failed to report EcoHealth's noncompliance and grant suspension into the www.SAM.gov database that alerts other U.S. Government agencies to risky grant recipients.
> >
> > **Both Daszak and officials at the National Institute of Allergy and Infectious Disease appeared to have known that EcoHealth's research was crossing the line in consideration of the moratorium on gain-of-function research.** In a 2016 project report concerning to the NIH concerning his research, EcoHealth described its plans to carry out experiments involving humanized mice using two chimeric bat coronaviruses.[111]
> >
> > Subsequently NIH wrote to EcoHealth, stating that the research studies appeared "to involve research covered under the pause."
>
> Daszak replied on behalf of EcoHealth Alliance, and asserted that the organization's research did not involve gain of function:
>
> > **"These 2 chimeric bat-like CoVs were constructed on Sept. 24, 2015. They use the backbone of a group 2b SARS-like bat CoV WIV1 and the spike proteins of two newly discovered bat SL-CoVs (Rs7327 and RsSHC014). The construction of these chimeric viruses aims to understand the receptor usage and infectivity of bat SL-CoVs that may be progenitors of SARS-CoV. We have not yet tested the pathogenicity of these viruses in animals."**

[111] Understanding the Risk of Bat Coronavirus Emergency. Project Number 5R01AI110964-04 https://reporter.nih.gov/search/H_f9L5dZYESM-o4gIMrLig/project-details/9320765

Daszak offered no explanation concerning how RsSHC014 differed from the RsSCHO14 spike protein that was reported to be of great concern in 2015.[112]

Instead, Daszak stated that this work would not be considered GoF because "…the pause specifically targeted experiments that related to the pathogenicity or transmissibility of SARS-CoV, MERS CoV and any influenza virus. Our molecular clone is WIV1, which is a group 2b SARS-like bat coronavirus that has never been demonstrated to infect humans or cause human disease." But this was not true.

> Gain of function research funded by the National Institute of Allergy and Infectious Diseases and the National Institute of Aging of the NIH concluded: "…viruses using the WIV1-CoV spike protein are capable of infecting HAE cultures directly without further spike adaptation. Whereas in vivo data indicate attenuation relative to SARS-CoV, the augmented replication in the presence of human *ACE2* in vivo suggests that the virus has significant pathogenic potential…"[113]
>
> "…studies that build reagents based on viruses from animal sources cannot exclude the possibility of increased virulence or altered immunogenicity that promote escape from current countermeasures. As such, the potential of a threat, real or perceived, may cause similar exploratory studies to be limited out of an "abundance of caution."[114]
>
> "…the WIV1-CoV cluster has been identified as a threat for future emergence in human populations due to robust replication in primary human airway epithelial cell cultures."[115]

In other words, WIV1 was known to be potentially dangerous to humans.

Daszak proposed that Daszak/EcoHealth and its collaborators would immediately stop their research and inform their NIAID program officer if the chimeras showed evidence of virus growth greater than 1 log (or 10 times) the growth rate of the original viruses and/or grow more efficiently in human lung cells.

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[112] Menachery VD, Yount BL, Sims AC et al. "SARS-like WIV1-CoV poised for human emergence." *PNAS* 2016 Mar;113(11):3048-3053
[113] Menachery VD, Yount BL, Sims AC et al. "SARS-like WIV1-CoV poised for human emergence." *PNAS* 2016 Mar;113(11):3048-3053
[114] IBID
[115] IBID

Ignoring obvious warning signs, NIAID agreed with EcoHealth's self-assessment and agreed to let EcoHealth police its own activities. A NIH July 7, 2016, response letter to EcoHealth included these statements:

> NIAID is in agreement that the work proposed under Aim 3 to generate MERS-like or SARS-like chimeric coronaviruses (CoVs) is not subject to the GoF research funding pause. This determination is based on the following: (1) the chimeras will contain only S glycoprotein genes from phylogenetically distant bat CoVs; and (2) recently published work demonstrating that similar chimeric viruses exhibited reduced pathogenicity. Therefore, it is not reasonably anticipated that these chimeric viruses will have enhanced pathogenicity and/or transmissibility in mammals via the respiratory route.

As a result, the NIAID added the following award condition, per the grant documents (NOTE: this is the specific language proposed by Daszak to NIAID):

> NIAID acknowledges that if any of the MERS-like or SARS-like chimeras generated under this grant show **evidence of enhanced virus growth greater than 1 log over the parental backbone strain**, Dr. Daszak will immediately stop all experiments w/ these viruses and provide the NIAID Program Officer and Grants Management Specialist, and Wuhan Institute of Virology Institutional biosafety Committee, with the relevant data and information related to these unanticipated outcomes. (Emphasis added).[116]

Daszak and EcoHealth did not do what they promised. Sometime during the period June 2017-May 31, 2018, the experiments involving chimeric viruses and humanized mice were carried out. EcoHealth and the Wuhan Institute of Virology infected humanized mice with the WIV1 parental virus and three chimeric viruses containing SHC014S, WUV16S and Rs4231S. The SHC014S virus grew at 10,000 times greater than the parent virus. Mice lost 20% of the body weight in six days.

At day two and four, "Viral loads in lung tissues of mice challenged with all three chimeras reached >10^6 genome copies per/g, significantly higher than related WIV1 infection (Fig. 6b). This demonstrates that pathogenicity of SARS-related coronaviruses in humanized mice differs

[116] https://republicans-energycommerce.house.gov/wp-content/uploads/2021/11/2021.10.27-Letter-to-NIH.pdf

with divergent S proteins, confirming the value of this model in assessing novel SARS related coronavirus pathogenicity." (Emphasis added).[117]

Despite running two years behind in submitting required reports to NIH, and the failure of EcoHealth to stop the experiments and report to NIAID as promised, NIH approved the renewal of EcoHealth's grant on June 18, 2018. In its November 5, 2018, progress report to NIH for the period of June 1, 2014, through May 31 2019, EcoHealth reported that the strains of viruses it was using could represent a significant threat to public health because they could escape existing vaccine and therapeutic treatments.[118]

The Congressional letter raises many important issues that need to be investigated and ends with a long list of demands from the NIH concerning the agency's grants to, and management and oversight of EcoHealth Alliance.

[117] IBID
[118] IBID

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From the Declaration by Andrew Huff Ph.D.,
Former Employee of EcoHealth Alliance

After being promoted to Vice President of EcoHealth Alliance, Dr. Huff had access to information about the organization's finances. He learned that EcoHealth was heavily dependent on government contracts to remain solvent and that cash flow was often tight. He also observed first-hand that EcoHealth engaged in minor fraud by overbilling time on contracts and double-dipping on some contracts between government agencies and provide donors.

Dr. Huff was routinely involved in meetings and informal discussions during which gain-of-function research was discussed.

During direct participation in the USAID PREDICT program, Dr. Huff saw first-hand that EcoHealth failed to pay adequate attention to biosafety, biosecurity, and risk management. The organization did not perform proper oversight of foreign laboratories at which research funded by EcoHealth took place. Dr. Huff expressed his concerns regularly and they were routinely dismissed by Daszak and other EcoHealth staff.

Dr. Huff met Dr. Shi Zhengli and Dr. Ralph Baric and attended presentations at which they discussed their work on the design and engineering of SARS-CoV-2 and the use of humanized mice in their experiments.

Dr. Huff was involved in the creation of a slide deck presented to In-Q-Tel which included the use of USAID PREDICT funding to collect coronavirus samples from bats all over the world, to analyze these viruses to identify their most dangerous features to humans, and then create chimeras to test on humanized mice.

Other Individuals, Research Institutions, and Organizations of Interest

The Rockefeller Foundation has given several grants to EcoHealth Alliance for the purpose of forming a network called One Health Alliance in South Asia (OHASA) for the purpose of investigating emerging infectious diseases, including bat viruses that have the potential to spread to humans.[119] [120]

In 2010, the Rockefeller Foundation published a report in partnership with the Global Business Network titled "Scenarios for the Future of Technology and International Development."[121] The collaboration used "scenario planning" to look at possible responses to hypothetical situations, including a pandemic. A scenario titled "LOCK STEP" describes a world of tighter top-down government control and more authoritarian leadership with innovation and growing citizen pushback after a pandemic is declared. The events described in this report are eerily like what started taking place in 2020.

In September 2020, The Rockefeller Foundation published a "Message Handbook" for "COVID-19 Testing and Tracing." The Handbook was designed to teach health professionals and others how "…to motivate the public to participate in testing and tracing." The Handbook provides messages developed through research, expert interviews, and testing that have been shown to lower resistance to regular testing and contact tracing. Readers are encouraged to reinforce "new norms" that include "ongoing, repetitive actions." These include:

> "Doctors, nurses, and health care workers are putting their lives at risk to care for people who need it. They need our help. Contact tracing stops more people from getting sick, so hospitals don't get crowded, doctors and nurses can stay safe, and every patient gets the attention they need."

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[119] The Rockefeller Initiative. Disease Surveillance Networks. https://www.rockefellerfoundation.org/wp-content/uploads/Disease-Surveillance-Networks-Initiative.pdf

[120] Epstein JH, Quan PL, Briese T et al. "Identification of GBV-D, a Novel GB-like Flavivirus From Old World Frugivorous Bats (*Pteropus gigantus*) in Bangladesh." *PLoS* 2010 Jul https://doi.org/10.1371/journal.ppat.1000972

[121] Technology's Power to Transform the Lives of the Poor Revealed in New Study by the Rockefeller Foundation and Monitor's Global Business Network." *https://www.tmcnet.com/usubmit/2010/06/21/4859175.htm#google_vignette* accessed 9.10.2022

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> "If you test positive, there is a short window of time to pinpoint who else might have the virus before they could lose their health and their jobs. If you identify who you were in contact with, you can stop the virus in its tracks."[122]

In August 2022, https://www.rockefellerfoundation.org/news/mercury-project-to-boost-covid-19-vaccination-rates-and-counter-public-health-mis-and-disinformation-in-17-countries-worldwide/

UC Davis One Health Institute leads the PREDICT Project, with partners including EcoHealth Alliance, Metabiota, and the Smithsonian Institute. The purpose of this project is to "…enable global surveillance for pathogens that can spillover from animal hosts to people…" and "…discover viruses of pandemic potential."[123]

In a series of emails between members of the PREDICT research team obtained by US Right To Know:

EcoHealth Alliance made requests via the predict-outbreak@ucdavis.edu email system for travel approval for Dr. Peng Zhou and Dr. Shi Zhengli to travel to the U.S. Both were listed as "PREDICT China Country Coordinators," both were listed as working at the Wuhan Institute of Virology, and both were traveling to the U.S. to meet with the PREDICT global team at EcoHealth Alliance for "China project updates."[124]

Metabiota also made several similar requests for foreign researchers to visit the U.S.

Emails also discuss subgrants through EcoHealth to other countries including China; and funds to Metabiota with subawards to other countries.

Many emails pertain to the Global Virome Project, which involves Nathan Wolfe at Metabiota and endeavors to "…identify virtually every viral pathogen on the planet."

Some emails refer to PREDICT work in Laos, which is one of the sources of bat viruses which were sent to The Wuhan Institute, one of which has a genetic sequence almost identical to SARS-CoV-2 (discussed in this manuscript above).

One journal article included in the document with the emails describes a PREDICT project that involved isolation of an Ebola virus from bats in Sierra Leone.

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[122] Rockefeller Foundation. Message Handbook: COVID-19 Testing and Tracing. September 2020
[123] https://whc.vetmed.ucdavis.edu/predict-project accessed 9.10.2022
[124] https://usrtk.org/wp-content/uploads/2021/10/UC-Davis-Jonna-Mazet-batch-1.pdf accessed 9.10.2022

Many names in the email exchanges are redacted.[125]

METABIOTA is an EcoHealth Alliance and UC Davis partner and received investment from the CIA and DoD investment firm In-Q-Tel[126] and numerous contracts and/or grants from the US government. Metabiota was funded in part by Rosemont Seneca, partially owned by Hunter Biden. An In-Q-Tel quarterly report titled "Mission Possible: Quenching Epidemics" lists Metabiota and EcoHealth Alliance as partners.[127]

Metabiota was also part of a consortium that included EcoHealth Alliance, University of California Davis and others. This group was formed as part of the second phase of USAID PREDICT program to investigate coronaviruses, influenza viruses, and filoviruses such as Ebola.[128] EcoHealth's Fiscal Year Annual report 2014 report confirms this arrangement.[129]

University of North Carolina Chapel Hill, Ralph Baric
Here are just a few of the projects involving Ralph Baric and conducted at or in partnership with UNCH:

Baric, in partnership with Chinese researchers, isolated and studied coronaviruses from bats with HKU spike protein. Funded by National Institutes of Health Grant R01AI89728 and R21AI109094
Yang Y, Du L, Liu C et al. "Receptor usage and cell entry of bat coronavirus HKU4 provide insight into bat-to-human transmission of MERS coronavirus." *PNAS* 2014;Aug;111(34):12516-12521

Baric and Shi Zhengli collaborated to study the virus surface spikes of MERS-CoV and a related bat coronavirus HKU4. Although HKU4 could not mediate viral entry into human cells, two mutations allowed it to do so.
Yang Y, Liu C, Du L et al. "Two Mutations Were Critical for Bat-to-Human Transmission of Middle East Respiratory Syndrome Coronavirus." *J Virol* 2015 Sep;89(17):9119-9123
Funded by NIH Grants R01AI089728 and R01AI110700

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[125] https://usrtk.org/wp-content/uploads/2021/10/UC-Davis-Jonna-Mazet-batch-1.pdf accessed 9.10.2022
[126] John T. Reinert. In-Q-Tel: The Central intelligence Agency as Venture Capitalist. https://scholarlycommons.law.northwestern.edu/njilb/vol33/iss3/4/ accessed 9.10.2022
[127] IQT Quarterly. Mission Possible: Quenching Epidemics. Winter 2016;7(3)
[128] USAID Announced Second Phase of Predict Project with Global Partners. November 21 2014. https://www.ecohealthalliance.org/2014/11/usaid-announces-second-phase-of-predict-project-with-global-partners accessed 9.10.2022
[129] EcoHealth Alliance Fiscal Year 2014 Annual Report. https://www.ecohealthalliance.org/wp-content/uploads/2016/01/EcoHealth_Alliance_FY14_Annual_Report.pdf accessed 9.10.2022

Baric and Shi Zhengli were both part of the research team which generated a chimeric SARS-CoV virus that could infect humans. Symptoms in infected humanized mice were similar to symptoms of SARS-C-V-2

Menachery VD, Yount BL, Debbink K et al. "A SARS-like cluster of circulating bat coronaviruses shows potential for human emergence." ***Nat Med*** **2015 Nov;21:1508-1513**

Funded by grants from NIH and NIAID: U19AI109761 (R.S.B.), U19AI107810 (R.S.B.), AI085524 (W.A.M.), F32AI102561 (V.D.M.) and K99AG049092 (V.D.M.), USAID-EPT-PREDICT funding from EcoHealth Alliance

Columbia University

The Department of Ecology, Evolution and Environmental and Environmental Biology lists three individuals with EcoHealth Alliance, including Peter Daszak, as faculty members.[130]

Columbia University Mailman School of Public Health announced a partnership with several organizations, including EcoHealth, to launch and operate New York City's first Pandemic Response Institute. The website states that this "…builds on Columbia's robust involvement in the NYC COVID-19 response and grants it a significant role in preparing New York City for future public health emergencies."[131] EcoHealth's website lists Columbia University as a partner.[132]

Yunnan Institute of Endemic Disease Control and Prevention

Received funding from The National Institute of Allergy and Infectious Disease (Grant #R01AI110964). Peter Daszak and EcoHealth served as consultants.

Li H, Daszak F, Chmura A, Zhang Y, Terry P, Fielder M. "Knowledge, Attitude and Practice Regarding Zoonotic Risk in Wildlife Trade, Southern China." *EcoHealth* 2021 Mar;18(2):95-106

Guandlong Provincial Center for Disease Control and Prevention

Daszak authored papers with researchers from this institution concerning pathogens with pandemic potential. Funding was provided by "…generous support of the American people through the United States Agency for International Development (USAID) Emerging Pandemic Threats PREDICT program (Cooperative Agreement No. AID-OAA-A-14-00102)."

Monagin C, Paccha B. Liang N et al. "Serologic and behavioral risk survey of workers with wildlife contact in China." *PLoS One* 2018 Apr;13(4):e0194647

Wellcome Trust

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[130] https://e3b.columbia.edu/faculty_location/eha-eco-health-alliance/ accessed 9.10.2022
[131] https://neighbors.columbia.edu/news/columbia-university-mailman-school-public-health-lead-new-york-citys-pandemic-response accessed 9.10.2022
[132] https://www.ecohealthalliance.org/partners accessed 9.10.2022

Has a data sharing agreement with many organizations in public health emergencies. These include EcoHealth Alliance, The Chinese Academy of Sciences, and [133]The Chinese Centre for Disease Control and Prevention.

Google
Google.org has been funding studies conducted by EcoHealth Alliance since 2010.
Here are some of the studies that include Daszak and/or EcoHealth Alliance Vice President Jonathon Epstein as authors and list Google as a funder:

Epstein JH, Quan PL, Briese T et al. "Identification of GBV-D, a Novel GB-like Flavivirus from Old World Frugiverous Bats (*Pteropus giganteus)* in Bangladesh." *PLoS Pathog* 2010 Jul;6(7):e1000972

Pernet O, Schneider BS, Beaty SM et al. "Evidence for henipavirus spillover into human populations in Africa." *Nature Comm* 2014 Sep;5:5342

Lee MH, Rostal MK, Hughes T et al. "Macacine Herpesvirus 1 in Long-Tailed Macaques, Malaysia, 2009-2011." *Emerg Infect Dis* 2015 Jul;21(7):1107-1113

The Wuhan Institute of Virology
The University of North Carolina at Chapel Hill
For reasons stated earlier in this paper

[133] https://wellcome.org/press-release/statement-data-sharing-public-health-emergencies accessed 9.10.2022

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Declaration of Dr. Andrew G. Huff, PhD, M.S.

I attest that the following is a true and accurate representation of facts and my experiences:

Name: Andrew G. Huff, PhD, M.S.

Personal History/Background/Qualifications:

- From 2002 to 2008 I served in the U.S. Army in both the Minnesota National Guard and on active duty in the US Army as an infantryman.

- I was ordered to serve on active duty to support and fight in the Global War on Terrorism as part Operation Enduring Freedom as an infantryman in Central America, and I volunteered to serve in combat in Operation Iraqi Freedom, where I received numerous medals, awards, and accolades at the low ranks of Private First Class and Specialist.

- While performing combat operations in Iraq, I continued my undergraduate studies while it was my turn to sleep and prepared and competed in Non-Commissioned Officer Review Boards, where I performed the best among the candidates in all aspects of the review except fitness. I was also nominated by my commanding officer to attend Officer Candidate School at the end of my tour in Iraq, based on my performance, leadership ability, and success at executing officer level tasks, which were assigned to me.

- After returning home from Iraq, I completed a heavily research and quantitatively focused bachelor's degree in Psychology at the University of Minnesota, which is one of the top psychological research institutions in the world. I worked directly with many of the world's leading experts in personality, vocational, career interests, clinical, and counseling psychology research, and completed independent quantitative psychological research which was submitted for peer review publication.

- Simultaneously, to earning my Bachelor's degree, I was a program assistant and contracts technical representative (COTR) for the United States Department of Veterans Affairs, where I relocated and opened several new outpatient mental healthcare offices for the agency and managed numerous contracts and relationships with healthcare providers. My supervisor became severely ill, and I independently and successfully managed the organization and contract facilities across the upper Midwest and staff in his absence at the age of 26, which resulted in a financial bonus paid by the government.

- Next, I earned a master's degree in Security Technologies with a minor in Geographic Information Systems, finishing at the top of my class, from the College of Science and Engineering at the University of Minnesota. In the program, I learned to solve national security problems against different types of critical infrastructures using complex systems analysis, systems modeling, high performance computing, intelligence collection techniques and trade craft, international security, bioterrorism, behavioral threat analysis, cryptography, cyber security, vulnerability, and risk assessment among other things. Upon completion of my master's degree coursework and research thesis defense, in only fifteen months, my thesis committee strongly encouraged me to obtain a PhD and was informed that I should meet with one of my instructors which was a member of the faculty in the School of Public Health.

- After meeting with Dr. Jeff Bender from the School of Public Health and College of Veterinary Medicine at the University of Minnesota, I was offered full employment as a Research Fellow at a Department of Homeland Security Center of Excellence at the University of Minnesota, along with a full scholarship to obtain a Ph.D. related to the fields of bioterrorism, biowarfare, chemical warfare or terrorism, pandemics, and emerging infectious disease. This is the best possible offer a Ph.D. student can receive anywhere throughout academia and is rare.

- I earned a Ph.D. from the University of Minnesota's School of Public Health's Environmental Health Science program with a specialization in Emerging Infectious Diseases. My core focus of my education and research was pandemic preparedness response, bioterrorism, biowarfare, biosecurity, chemical attacks & exposures, and biosafety. I completed the program at a record pace (around 3 years) and all my novel research was published in peer reviewed and referred journals before I submitted my dissertation for review.

- While working as a Research Fellow at a Department of Homeland Security Center of Excellence, I frequently traveled to Washington, D.C. and around the country where I became in an active member of US government committees and meetings related to pandemics, public health, and national security. I was introduced to many high-level managers within the US government working in these areas, and I frequently presented my research at US government meetings, to executives in the private sector at large multinational companies, and worked directly with industry and state governments to help improve their national security in areas where I have subject matter expertise.

- Upon completing my Ph.D., I was recruited by Sandia National Laboratories, where I served the U.S. Government as a Senior Member of the Technical Staff and held a Department of Energy 'Q' clearance (equivalent to the Department of Defense's Top-

Secret designation). At Sandia, I analyzed complex national security problems in my areas of expertise, served as a subject matter expert in public health systems and food systems, and participated in a broad spectrum of projects related to pandemic preparedness, mitigation, and response. Wishing to leave the classified work environment, and due to a funding shortfall in my area of passion (preventing intentional contamination of the food supply), I decided to seek work elsewhere in the fall of 2014 and I applied to EcoHealth Alliance in September of 2014.

- Shortly after applying to a position at EcoHealth Alliance, I interviewed with Dr. Peter Daszak on the telephone and then traveled to EcoHealth Alliance's office in New York City for a comprehensive on-site interview. After completing the interview, I was offered and accepted a position as a Senior Scientist in charge of the Data and Technology team. Upon beginning work at EcoHealth Alliance, I was asked to perform a series of duties which would be considered normal in any kind of scientific or academic organization.

Information Related to EcoHealth Alliance and the Development of SARS-COV2:

- In late 2014, I was asked to prepare a report for the Intelligence Advanced Research Projects Activity, Office of the Directorate of National Intelligence, (IARPA). I later learned upon promotion to Associate Vice President while attending weekly finance updates that EcoHealth Alliance did not receive any funding from this agency (IARPA), as far as I am aware. **Reference: IARPA Collaborator Report from Dr. Huff's documents retained from his employment at EcoHealth Alliance.**

- In late 2014, I was asked to review (provide edits, comments, and feedback) on a research proposal that was in preparation to be submitted to the National Institutes of Health's (NIH) National Institute for Allergens and Infectious Diseases (NIAID) to conduct Gain of Function research and development with numerous partners including the Wuhan Institute of Virology, which was supported by Dr. Ralph Baric at the University of North Carolina (UNC). **Reference: File name "CoV as submitted" titles "Understanding the Risk of Bat Coronavirus Emergence" Dr. Huff's documents retained from his employment at EcoHealth Alliance.**

    - I attest that I reviewed the proposal that was submitted to NIH which detailed the gain of function virology work that was being conducted to create the agent known as SARS-COV2, which causes the disease known as COVID-19.

    - I attest that the proposal clearly stated that the gain of function work on SARS-COV2 was already underway in China, prior to October 2014, at the Wuhan

Institute of Virology (WIV), with the support of USAID in collaboration with EcoHealth Alliance and EcoHealth Alliance's partners and sponsors.

- I attest that I made Dr. Peter Daszak aware of the lack of a Biological Security Officer (BSO) and Institutional Biosafety Committee (IBC) at EcoHealth Alliance in reference to the Select Agent Form on in the "Understanding the risk of Bat Coronavirus Emergence" proposal in accordance NIH requirements.

- I witnessed firsthand presentations by Dr. Shi Zhengli (WIV) and Dr. Ralph Baric (UNC) at EcoHealth Alliance related to their Gain of Function work managed and supported by EcoHealth Alliance.

- I witnessed firsthand presentations by the executive team at EcoHealth Alliance related to the gain of function work conducted at EcoHealth Alliance.

- I attest that EcoHealth Alliance's developed SARS-COV2 and is responsible for the development of the agent SARS-COV2 during my employment at the organization.

- I attest that I informed the EcoHealth Alliance executive team that I believed there were biosafety and biosecurity risks in contract laboratories during an executive meeting. Specifically, I was concerned that EcoHealth Alliance did not have enough visibility or firsthand knowledge of what was happening at foreign laboratories contracted and managed by EcoHealth Alliance. During this meeting I discussed bio-risk management with the team due to these concerns. Dr. Daszak refused to mitigate the risks without any objection or discussion from the other executives. In my opinion, Daszak was dismissive of my concerns. He did not seem concerned about EcoHealth's lack of oversight which I felt was strange because it is typically the CEO's duty to protect the organization from organizational threats and risks. After raising my concern, I accepted Peter's position that our control measures were adequate. **Reference: See leaked cables that the US Consulate Cables to the State Department reported Laboratory Safety Concerns at the Wuhan Institute of Virology.**

- In this same short time-period, I was asked to review and contribute to an investment "pitch dick" (i.e., a PowerPoint presentation used in venture capital presentations) that was presented to an organization called In-Q-Tel. In the pitch dick, we proposed an extension of the USAID global disease surveillance work, SARS-COV2 gain of function and humanized mice research conducted by Drs. Baric and Zhengli, and my work from my department developing advanced biosurveillance technologies and platforms. This

work was presented to In-Q-Tel (which can be verified by their own records). I do not know what the outcome of that meeting as it was not communicated to me by Dr. Daszak. **Reference: File name Peter Daszak In-Q-Tel October 2015 from Dr. Huff's documents retained from his employment at EcoHealth Alliance and the In-Q-Tel Quarterly report.**

- On or around June 2015, I was promoted to Vice President. After being promoted to Vice President, I was exposed and participated in more aspects of the organization, as would be expected from an Executive Officer at any organization.

- I began attending weekly financial meetings where I learned that the organization was tight on cash, depended heavily on government contract salary overhead to remain solvent, and that the organization was not involved in traditional conservation work as classically defined. This was upsetting as this was one of the main reasons that I wanted to join the organization (being a conservationist and naturalist). **Reference: EcoHealth Alliance Marketing video from Dr. Huff's documents retained from his employment at EcoHealth Alliance.**

- I also observed that EcoHealth Alliance was engaged in irregular financial transactions regarding U.S. Government grants. Specifically, I believe there was timecard fraud and observed what I appear to be double dipping on contracts, between government organizations and private donors (e.g., Skoll Foundation, Google Foundation, Bill & Melinda Gates Foundation, & Wellcome Trust), or both. **Reference: Compare stated objectives, work locations, and data collection across a range of projects from Dr. Huff's documents retained from his employment at EcoHealth Alliance.**

- I later confronted Dr. Peter Daszak, Harvey Kasdan (CFO, deceased), Dr. Aleksei Chmura about the financial fraud when I was upset, arguing for pay raises in my department, company-wide salary increases, and for myself. Shortly thereafter (1-2 days), CFO Harvey Kasdan passed away from a heart attack. I am not insinuating foul play, but I believe the stress was too much for him in his physical condition. ***R*eference: Harvey Kasdan's Obituary.**

- I also observed, while attending board meetings and in communications directly with board members, that Dr. Peter Daszak had a pattern of over-simplifying and lying by omission to our stakeholders (including the board of directors). For example, while EcoHealth Alliance positioned itself as a conservation organization, no substantial conservation work, as traditionally defined, was occurring at the organization.

- The USAID Predict program was a global hunt for viruses predicated upon the promise of predicting and preventing pandemics. I believe that the data limitations and methods for collecting and analyzing that data make this goal impossible to achieve. I further believe that this program is more strongly aligned with collecting the biological samples to conduct gain of function viral work, or intelligence collection, than prediction and prevention of pandemics.

- Gain of function research is a highly contentious topic in my scientific area of expertise. Those who are for it make the argument that if you can identify a high-risk pathogen, and then engineer the pathogen in the laboratory to increase its transmissibility, infectivity, pathogenicity, or virulence, then you can develop medical countermeasures to prevent the spread of disease, if an outbreak of a **naturally evolving** agent were to occur. I believe this logic to be inherently flawed because **it is naïve to think that humans can modify or engineer a naturally occurring pathogen that would evolve similar to the way infectious agents naturally evolve.** Typically, Gain of Function research (via selection of rare traits or genetic manipulation or engineering of the agent) undergoes **thousands of years of *unnatural evolution* (decided by humans not by nature) in a laboratory in a matter of days weeks or months.** This is akin to predicting the future, with the likelihood of success decreasing in every timestep.

- After being promoted to Vice President, I commented on several concerns I had related to protecting the organization including biosafety, biosecurity, enterprise security, and risk management. None of the other executives voiced any opposition to Gain of Function research being conducted at EcoHealth Alliance, and Dr. Daszak was heavily supportive of the work. Drs. Johnathan Epstein and Kevin Olival were supportive of the work and were key contributors to the gain of function work in the SARS-COV2 proposal funded by USAID and NIH, and executed by EcoHealth Alliance, the WIV, and UNC. My opposition to Gain of Functions research stemmed from my Ph.D. studies taught by my Committee Chair, Dr. Michael T. Osterholm, who was also President Joe Biden's COVID advisor.

- In November 2015, a scientifically peer reviewed, and referenced article was published by collaborators from the Wuhan Institute of Virology, the University of North Carolina Chapel Hill (UNC), the Food and Drug Administration, Harvard Medical School, and the Bellinzona Institute of Microbiology. The peer reviewed article was titled "A SARS-like Cluster of Circulating Bat Coronaviruses Shows Potential for Human Emergence" in the journal *Nature Medicine.* The authors initially omitted the funding source from the USAID - EPT - PREDICT program, which I was a co-investigator and country coordinator while employed by EcoHealth Alliance. The USAID - EPT - PREDICT funding cited in the article was used to develop a relationship between Drs. Ralph Baric

(UNC) and Zhengli-Li Shi of the Wuhan Institute of Virology at EcoHealth Alliance, which was orchestrated by Dr. Peter Daszak. Additionally, the USAID- EPT - PREDICT funding used in this peer reviewed paper was used to collect biological samples from bats globally. Then, the collaborators analyzed the collected samples to extract SARS like-corona viruses, and select or engineer genetic features within the viruses, collected with USAID - EPT - PREDICT funding, to create hybrid chimeric viruses. Chimeric viruses are defined as combining the genetic material from two or more distinct viruses. **The process of developing SARS-COV2 was also described in detail in the proposal submitted to, and ultimately funded by, the National Institutes of Health (HHS NIH), The National Institute of Allergy and Infectious Diseases (NIAID), by EcoHealth Alliance with the WIV and UNC listed as collaborators.** It is my attestation, that the creation of these SARS-like chimeric viruses described in this article include SARS-COV2. Lastly, the engineered SARS-COV2 was then used to test SARS vaccines and monoclonal antibody therapeutics against the disease in mice. **Reference: Menachery, V. D., Yount, B. L., Debbink, K., Agnihothram, S., Gralinski, L. E., Plante, J. A., ... & Baric, R. S. (2015). A SARS-like cluster of circulating bat coronaviruses shows potential for human emergence.** ***Nature medicine*****, *21*(12), 1508-1513.**

- Dr. Peter Daszak approached me in late 2015 and stated that somebody from the Central Intelligence Agency (CIA) approached him and stated that they were interested in the places we were working, the people we were working with, and the data we were collecting. Peter then proceeded to ask me for my advice, and specifically asked whether we should work with them. I was shocked that Peter asked me this and was excited for the opportunity. I stated to Peter that "It never hurts to talk to them. There could be money in it." Peter then later confirmed over the next 2 months, between our weekly meetings that the relationship with them was proceeding.

- In March 2016, a paper was published by Dr. Ralph Baric, an EcoHealth Alliance gain of function collaborator working at UNC, in PNAS titled "SARS-like WIV1-CoV Poised for Human Emergence." In the article, the authors of the paper describe in detail how they used, designed, and constructed full-length and chimeric viruses to determine if they would replicate in human airway cultures. This specific paper is relevant because it compares and documents the effectiveness of different variations of coronavirus spike proteins at infecting human cells specifically by binding to ACE2 receptor, which was a critical and necessary step to design and engineer the SARS-COV2 virus. While employed at EcoHealth Alliance, I met both Dr. Shi Zhengli and Dr. Ralph Baric, where they presented their work on the design and engineering of SARS-CoV2 (coronavirus

gain of function research), and the use of highly specialized humanized mice models, which were necessary to successfully build SARS-COV2. These facts are supported by numerous recorded presentations by Dr. Peter Daszak and Dr. Ralph Baric from 2015-2019. Some of which, I personally attended while employed at EcoHealth Alliance. Additionally, the specific gain of function work described in this paper was presented by Dr. Peter Daszak to In-Q-Tel, a DoD and CIA venture capital firm. In the slides presented to In-Q-Tel, which I personally helped create at EcoHealth, describe the use of USAID – EPT – PREDICT funding to collect coronavirus samples from bats globally, where they are then analyzed to identify their most dangerous features to humans, and recombined to make new coronaviruses like SARS-COV2. Then, these viruses are tested on humanized mice to validate lethality and transmissibility. EcoHealth Alliance then used Dr. Baric's work for testing experimental vaccines, treatments, and therapeutics against the newly engineered SARS-COV2 strain to determine which countermeasures would be the most effective at mitigating the disease in humanized mice. **Reference: Menachery, V. D., Yount Jr, B. L., Sims, A. C., Debbink, K., Agnihothram, S. S., Gralinski, L. E., ... & Baric, R. S. (2016). SARS-like WIV1-CoV poised for human emergence.** ***Proceedings of the National Academy of Sciences, 113*****(11), 3048-3053.**

- In late September or early October of 2019, I was contacted by Dr. Amy Jenkins and she was attempting to recruit me to be a Program Manager for emerging infectious disease work at the Defense Advanced Research Projects Agency (DARPA). I first met Dr. Amy Jenkins as a Ph.D. student and paid Research Fellow at a Department of Homeland Security Center of Excellence at the University of Minnesota in 2014. The position at DARPA was presented to me as if it was mine if I wanted it and I was told that it would need Top Secret Security clearance with a polygraph. I felt that the recruitment effort was quite strange as I had not worked full-time and directly in the national security space since 2014 at Sandia National Laboratories and I had no clue how Dr. Jenkins obtained my new personal cell phone number. Coincidentally, this is when epidemiological evidence indicates that the first cases of COVID-19 likely emerged. The two events may not be related; however, it is my belief that people working within the US government potentially identified me as a risk to knowing firsthand that the SARS-COV2 disease emergence event was a consequence of the US government's sponsorship of the genetic engineering of SARS-COV2 domestically and abroad. If I would have accepted the position, then I suspect that DARPA would have disclosed restricted information to me which would have consequently prevented me from discussing any of this information publicly, like I have been and am doing now. The recruitment effort itself was highly suspect as it seemed as if DARPA was completely circumventing the US government recruitment process for one of the most prestigious scientific positions in the world.

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- I attest that I analyzed the funding of Dr. Kristian Andersen of the Scripps Research Institute from data obtained from NIH funding databases. Dr. Andersen's funding dramatically increased after changing his position on the characterization of the agent as being manmade, to naturally emerging, after a series of discussions with Dr. Anthony Fauci.

Total Funding Awarded Per Month Before Fauci Teleconference	Total Funding Awarded Per Month After Fauci Teleconference
$393,079.65	$800,139.15
Total Funding Awarded Per Calendar Year Before Fauci Teleconference	**Total Funding Awarded Per Calendar Year After Fauci Teleconference**
$ 1,042,628.25	$2,284,161.08
Total Continuing Funding Before Fauci Teleconference	**Total Continuing Funding After Fauci Teleconference**
$7,141,011.83	$23,724,681.83

Total Continuing Funding INCREASE After Fauci Teleconference

$16,583,670.00

- Lastly, at no point in time has any restricted information, including classified information, been shared with me related to the domestic or foreign engineering of the biological agent SARS-COV2, the subsequent release of SARS-COV2, the attempted cover-up of by officials working for the United States government. I have never leaked any legally obtained classified information or violated the rules and laws related to my past security clearances. The information that I have shared from my time at EcoHealth Alliance is not restricted by any non-disclosure agreement, nor is it US government protected or restricted information, as EcoHealth Alliance is supposedly a non-profit

corporation conducting scientific research to protect human and animal health. All the documents that I have shared were created by myself or other personnel by EcoHealth Alliance and were not subject to derivative classification by the US government, which is standard practice in academic institutions. My findings, opinions, and analysis were informed by my highly specialized education in the field of emerging infectious diseases from one of the top 5 graduate programs in the world, by my experience working in the field, and by analysis of publicly available open source and open access information. Simply, I know how and where to find accurate and relevant information related to pandemics, emerging diseases, biowarfare, and bioterrorism quickly and know how to properly frame this information from my knowledge of how the government works in the context of relevant policy frameworks.

- In context, this series of events when they took place, did not seem of any consequence nor did I ever think or believe that I would be in this terrible position. I have been severely harassed by what appears to be state-sponsored actors based on the level of sophistication, persistence, and duration, of the harassment and crimes committed against me. I understand that these facts are difficult for our country. I have viewed this as a non-partisan issue since coming forward as a Whistleblower, as my only goal is to prevent another manmade pandemic from occurring. COVID-19, the disease caused by SARS COV2, in my professional opinion, is the result of Gain of Function research that was mismanaged by EcoHealth Alliance and its contractors.

I declare (or certify, verify, or state) under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed On (Date): 13 September 2022

Signature: 
Andrew G. Huff, Ph.D., M.S.

EXHIBIT 15

EXHIBIT 15

To: Peter Daszak[daszak@ecohealthalliance.org]; Baric, Toni C[antoinette_baric@med.unc.edu]
Cc: Alison Andre[andre@ecohealthalliance.org]; Aleksei Chmura[chmura@ecohealthalliance.org]
From: Baric, Ralph S[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=BB0D9CC80C184735A4E862C3BDD8A15D-RALPH S BAR]
Sent: Thur 2/6/2020 4:01:22 PM (UTC-05:00)
Subject: RE: No need for you to sign the "Statement" Ralph!!

I also think this is a good decision. Otherwise it looks self-serving and we lose impact. ralph

From: Peter Daszak <daszak@ecohealthalliance.org>
Sent: Thursday, February 6, 2020 3:16 PM
To: Baric, Ralph S <rbaric@email.unc.edu>; Baric, Toni C <antoinette_baric@med.unc.edu>
Cc: Alison Andre <andre@ecohealthalliance.org>; Aleksei Chmura <chmura@ecohealthalliance.org>
Subject: No need for you to sign the "Statement" Ralph!!
Importance: High

I spoke with Linfa last night about the statement we sent round. He thinks, and I agree with him, that you, me and him should not sign this statement, so it has some distance from us and therefore doesn't work in a counterproductive way.

Jim Hughes, Linda Saif, Hume Field, and I believe Rita Colwell will sign it, then I'll send it round some other key people tonight. We'll then put it out in a way that doesn't link it back to our collaboration so we maximize an independent voice.

Cheers,

Peter

Peter Daszak
President

EcoHealth Alliance
460 West 34th Street – 17th Floor
New York, NY 10001

Tel.
Website: www.ecohealthalliance.org
Twitter: @PeterDaszak

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that prevent pandemics and promote conservation.

EXHIBIT 16

EXHIBIT 16

DEPARTMENT OF HEALTH & HUMAN SERVICES
Public Health Service

National Institutes of Health
National Institute of Allergy
and Infectious Diseases
Bethesda, Maryland 20892

23 July 2021

Drs. Aleksei Chmura and Peter Daszak
EcoHealth Alliance, Inc.
460 W 34th St
Suite 1701
New York, NY 10001

Re: R01AI110964, U01AI151797, U01AI153420

Dear Drs. Chmura and Daszak:

Thank you for your correspondence of April 11, 2021 and April 23, 2021 regarding R01AI110964. We are in the process of conducting detailed analyses of your answers to our questions and well as of the documents you sent, and we have the following additional requests:

1. Records

For us to continue our analyses, we will need to receive and review WIV's records validating expenditures specific to R01AI110964 as well as any and all monitoring, safety, and financial reports specific to R01AI110964 that WIV submitted to you. As a reminder, subawardees are required to have a financial management system that includes records that identify adequately the source and application of funds for federally-funded activities. These records must contain information pertaining to Federal awards, authorizations, obligations, unobligated balances, assets, expenditures, income and interest and be supported by source documentation. 45 C.F.R. §§ 75.101 and 75.302.

As a term and condition of award, NIH "must have the right of access to any documents, papers, or other records of the non-Federal entity which are pertinent to the Federal award, in order to make audits, examinations, excerpts, and transcripts" (45 C.F.R. 75.364). This right of access applies not only to awardee records, but also to subawardee records. Awardees indicate their acceptance of an NIH award and its associated terms and conditions as they draw down the NIH grant funds to support the scientific project (see NIHGPS Section 5).

We will also need to see subaward agreements, subawardee audit reports, subawardee safety monitoring documents, subawardee progress reports submitted to you, and subawardee financial and accounting records for two other NIH EcoHealth Alliance grants. Specifically, please send us all responsive documents for:

- U01AI151797 (Daszak): subawardees Chulalongkorn Hospital, Chulalongkorn University, Duke-National Singapore University, and University of North Carolina at Chapel Hill
- U01AI153420 (Epstein): subawardees International Center for Diarrhoeal Disease Research of Bangladesh, Institute of Epidemiology Disease Control and Research of Bangladesh.

We remind you that the Notice of Award for U01AI151797 already contains the following specific award conditions that must still be satisfied by 30 days from establishment.

> Subaward Agreement Requirements: The ECOHEALTH ALLIANCE, INC. must provide NIAID with copies of all (existing and newly established) subaward agreements established under this award, including descriptions of the biosafety monitoring plans, within 30 days of establishment.
>
> Federal Funding Accountability and Transparency Subaward Reporting System (FSRS) Requirements: This award is subject to the Transparency Act subaward reporting requirement of 2 CFR Part 170, which must be reported through the Federal Funding Accountability and Transparency Subaward Reporting System (FSRS). The ECOHEALTH ALLIANCE, INC. must provide NIAID with proof of documentation of timely entries of subaward information into the FSRS within 30 days of submitting to FSRS.

2. Reports

We are also writing to notify you that a review of our records for R01AI110964 indicates that EcoHealth Alliance, Inc. is out of compliance with requirements to submit the following reports that are outlined in the NIHGPS: the Federal Financial Report (FFR, see 8.4.1.2.3 Modified Financial Reporting Requirements) and the Interim Research Performance Progress Report (I-RPPR, see NIHGPS 8.4.1.4 Final Research Performance Progress Report).

R01AI110964 was issued under the Streamlined Noncompeting Award Process (SNAP). For awards under SNAP, an FFR must be submitted within 120 days after the end of the competitive segment and must report on the cumulative support awarded for the entire segment.

Additionally, NIH requires that organizations submit an Interim-RPPR while their Type 2 application is under consideration. In the event that the Type 2 is funded, NIH treats the Interim-RPPR as the annual performance report for the final year of the previous competitive segment.

The FFR and I-RPPR for R01AI110964 were due within 120 days after the end of the project period. In this case, the competitive segment ended on May 31, 2019, and reports were due September 30, 2019. To date, NIH has still not received these reports. Compliance with Section 8, Administrative Requirements within the NIH Grants Policy Statement (NIHGPS) is a standard term and condition of award that applies to all NIH recipients.

A recipient's failure to comply with the terms and conditions of award, may cause NIH to take one or more actions on the award, depending on the severity and duration of the non-compliance. Additionally, a history of non-compliance related to R01AI110964, including reporting non-compliance, may impact other projects where EcoHealth serves as the primary grant recipient. When a recipient has a history of failure to comply with the general or specific terms and conditions of a previous Federal award, NIH may impose specific award conditions on other awards of the recipient, including withholding authority to proceed to the next phase of a project until receipt of evidence of acceptable performance (see NIHGPS Section 8.5, Remedies for Noncompliance or Enforcement Actions: Suspension, Termination, and Withholding of Support).

In closing, please be advised that EcoHealth Alliance, Inc. must satisfy the existing specific award condition for U01AI151797 by 30 days from establishment and must provide the remaining documents and reports requested herein for all three grants (R01AI110964, U01AI151797, U01AI153420) no later than August 27, 2021.

Please let me know if you have any questions concerning the information in this letter.

Sincerely,

Lauer, Michael (NIH/OD) [E] Digitally signed by Lauer, Michael (NIH/OD) [E] Date: 2021.07.23 17:24:01 -04'00'

Michael S Lauer, MD
NIH Deputy Director for Extramural Research
(b) (6)

cc: Ms. Emily Linde
Dr. Erik Stemmy

EXHIBIT 17

EXHIBIT 17

DEPARTMENT OF HEALTH & HUMAN SERVICES
Public Health Service

National Institutes of Health
Bethesda, Maryland 20892

August 19, 2022

The Honorable James Comer
Ranking Member, Committee on Oversight and Reform
U.S. House of Representatives
Washington, DC 20515

Dear Representative Comer:

Thank you for your interest in the work of the National Institutes of Health (NIH). I write to you today in a continuing effort to be responsive to your inquiries about NIH oversight of awards to EcoHealth Alliance (EHA).

As you know, the National Institute of Allergy and Infectious Diseases (NIAID) awarded EHA grant R01AI110964 ("R01 award") after the application received a meritorious score through the peer review process. This grant included three sub-awards, including one to the Wuhan Institute of Virology (WIV) and had a performance period starting on June 1, 2014. The renewal application for this grant underwent peer review, and the Notice of Award was issued on July 24, 2019. The research approved under this grant sought to understand how bat coronaviruses evolve naturally in the environment to become transmissible to the human population. This type of research is a critical component of pandemic preparedness. Identifying pathogens that have the potential to cause disease in humans allows the research community to prepare for how to respond if these pathogens do enter the human population.

NIH's Office of Extramural Research (OER) suspended EHA grant R01AI110964 on July 8, 2020, due to grant administrative non-compliance concerns. Over time, NIH reviewed EHA's compliance with requirements under the R01 award and requested information and documentation from EHA to enable NIH to conduct its review.

NIH also reviewed EHA's compliance with requirements under two other NIH awards to EHA, the Research Project Cooperative Agreements ("U awards"). See Table 1 for a list of all current NIH awards to EHA.

Table 1: Current NIH Awards to EHA

Award Number	Grant Title	Performance Period
R01AI110964	Understanding the Risk of Bat Coronavirus Emergence	July 1, 2014-May 31, 2019; Renewal: June 1, 2019-May 31, 2024*

U01AI151797	Understanding Risk of Zoonotic Virus Emergence in Emerging Infectious Disease Hotspots of Southeast Asia	June 17, 2020-May 31, 2025**
U01AI153420	Study of Nipah Virus (NiV) Dynamics and Genetics in Bat Reservoirs and of Human Exposure to NiV Across Bangladesh to Understand Patterns of Human Outbreaks	September 15, 2020-June 30, 2025**

*This grant was suspended on July 8, 2020 and has remained suspended.
**Specific award conditions imposed on January 6, 2022 but was never suspended.

As NIH notified you on January 6, 2022, NIH sent a letter to EHA that day conveying the outcome of its detailed administrative review of compliance under the U awards. NIH identified a number of compliance issues, including inadequate oversight in monitoring the activities of its subawardees, failure to report subawards to the General Services Administration's Federal Subaward Reporting System, and errors in indirect rate charges. In cases of non-compliance, NIH's approach is generally to provide a grantee the opportunity to come into compliance in an effort to preserve the research, when possible. This approach is consistent with HHS grant regulations, which provide that in cases of non-compliance, a funding agency can impose specific award conditions; and if the agency determines that the non-compliance cannot be remedied by specific award conditions, then the agency may take more severe actions, such as terminating an award in whole or in part.

Our January 6, 2022 letter announced immediate imposition of specific award conditions on the U awards to allow NIH to monitor these awards more closely. The U awards were never suspended. In addition, the letter outlined areas where EHA needed to improve its administrative policies and practices. NIH requested EHA submit a Corrective Action Plan (CAP) to address these issues.

EHA provided a proposed CAP to NIH on February 4, 2022. The CAP outlined steps EHA would take to address the non-compliance NIH identified under the two U awards. Between February and April 2022, NIH approved EHA's CAP and EHA implemented the CAP. Pursuant to the CAP, EHA revised the U subaward agreements to include details on EHA's procedures for access to subawardees' records and financial statements, data-sharing and management of awards, and a correction of the Facilities and Administrative cost rate. EHA also provided NIH with new and updated EHA policies that describe how, for all EHA projects, EHA will comply with reporting requirements and other deficiencies identified by NIH.

I write today to update you on EHA's implementation of the CAP under the U awards, the conclusion of NIH's review of compliance under the R01 award, and the next steps NIH will take with EHA. At this time, EHA has successfully implemented the NIH-approved CAP for its active U awards, which includes rewriting subaward agreements, and improving monitoring and reporting conflicts of interest by its subawardees. Accordingly, NIH has determined that EHA was able to resolve the problems identified with those awards. For the R01 award, NIH identified the same issues that were present with the U awards (including inadequate oversight in monitoring the activities of its subawardees, failure to report subawards to the General Services Administration's Federal Subaward Reporting System, and errors in indirect rate charges), as

well as reporting delinquencies, such as the late submission of the fifth year progress report. NIH has determined that these problems can be remedied by imposing specific award conditions, because EHA demonstrated that it could resolve these same problems under the U awards with the successful implementation of a CAP.

However, NIH also identified one non-compliance under the R01 award that cannot be remedied with specific award conditions. NIH has requested on two occasions that EHA provide NIH the laboratory notebooks and original electronic files from the research conducted at WIV. To date, WIV has not provided these records. Under 45 CFR 75.371, "If a non-federal entity fails to comply with federal statutes, regulations, or the terms and conditions of a federal award, the HHS awarding agency or pass-through entity may impose additional conditions, as described in § 75.207. If the HHS awarding agency or pass-through entity determines that non-compliance cannot be remedied by imposing additional conditions, the HHS awarding agency or pass-through entity may take one or more [enforcement] actions, as appropriate in the circumstances[.]" 45 CFR 75.371. Such actions may include partly terminating the federal award. Id. at 75.371(c).

Today, NIH has informed EHA that since WIV is unable to fulfill its duties for the subaward under grant R01AI110964, the WIV subaward is terminated for failure to meet award terms and conditions requiring provision of records to NIH upon request.

In light of the cooperation from EHA and the subsequent substantial improvements in administrative processes that EHA demonstrated with the two U awards, NIAID will begin to engage with EHA to renegotiate the specific aims and objectives of the R01 grant without the involvement of WIV. If an agreement is made, the revised grant will be reviewed again in its entirety to ensure all applicable policy and guideline requirements are met including the HHS Framework for Guiding Funding Decisions about Proposed Research Involving Enhanced Potential Pandemic Pathogens (P3CO) and other relevant policies and guidelines. A revised Notice of Award will be issued, subject to specific award conditions and any additional precautions that may be appropriate for inclusion, and the suspension on the grant will be lifted. If revisions to the grant's aims and objectives cannot be revised to stay within the original peer reviewed, scientific scope of the project, NIH reserves the right to request a bilateral termination of the remainder of the award.

As specific award conditions, NIH will maintain a higher level of oversight over all EHA awards for a minimum of three years, including a doubling of the frequency for the required scientific progress and financial reports, and a requirement that EHA submit additional documents illustrating their subaward monitoring activity. In addition, EHA will be required to conduct onsite inspections of all of its subawardees every six months to confirm that all terms of subaward agreements are being fully and appropriately executed. EHA will also be required to submit updated subaward agreements under the revised R01 award that address the deficiencies identified by NIH.

NIH takes its oversight of grants very seriously and always considers what further measures can be taken to strengthen routine oversight of grants at NIH. In light of this compliance case, NIH has taken additional steps. NIH has incorporated additional automated systems of controls for

the timely receipt of progress reports to ensure that the most recent information is received and accepted by program officers. NIH has implemented program scripts in the NIH grants system (eRA) that send additional reminders to grant recipients and NIH staff of delinquencies if progress reports are either delayed or not fully reviewed and accepted. Should this happen, the system establishes a "red bar" to funding of the next non-competing renewal, which would prevent the award from being processed until the "red bar" is resolved. NIH believes that these new measures will further strengthen our oversight of grantees while continuing the life-saving work done by NIH grantees.

NIH is committed to ensuring responsible stewardship and accurate reporting of the use of federal funds. In a continued effort to be transparent, NIH has attached to this letter the communications between NIH and EHA regarding the implementation of the CAP. I hope this information is helpful to you.

Sincerely,

Michael S. Lauer, M.D.
Deputy Director for Extramural Research
National Institutes of Health

Enclosures:
First letter from NIH to EHA on January 6, 2022
Second letter from NIH to EHA on January 6, 2022
CAP proposed by EHA (in 2 parts)
NIH response to EHA's CAP
Follow-up CAP documents submitted by EHA (in 5 parts)
Letter from NIH to EHA on August 19, 2022

EXHIBIT 18

EXHIBIT 18

To: Baric, Ralph S[rbaric@email.unc.edu]
Cc: jwleduc@UTMB.EDU[jwleduc@UTMB.EDU]; Dave Franz
LaTasha[LMorgan@nas.edu]; Baric, Toni C[antoinette_baric@med.unc.edu]; Lowenthal, Micah[mlowenth@nas.edu]
From: Rusek, Benjamin[BRusek@nas.edu]
Sent: Thur 11/2/2017 3:22:49 PM (UTC-04:00)
Subject: NAS GNL invitation to participate in a meeting of U.S. and Chinese experts, Jan 16-18 2018
Wuhan Meeting Summary May 2017.pdf
NAS GNL Galveston meeting ltr of invite Baric.docx

Greetings Dr. Baric,

The U.S. National Academy of Sciences (NAS) and the Galveston National Laboratory (GNL) University of Texas Medical Branch are pleased to invite you to participate in a meeting of U.S. and Chinese experts working to counter infectious disease and improve global health. The meeting is being convened by the NAS and GNL and will take place January 16-18, 2018, in Galveston, Texas, USA. Please see the attached invitation letter (and the May 2017 Wuhan meeting summary mentioned in the letter) for additional information.

Kind regards,

Ben

Benjamin J. Rusek
Senior Program Officer
Policy and Global Affairs Division
The U.S. National Academy of Sciences
Phone:
Cell:
Fax:
Skype:

To: Baric, Ralph S [rbaric@email.unc.edu]
Cc: Benjamin Rusek (BRusek@nas.edu)[BRusek@nas.edu]
From: LeDuc, James W.[jwleduc@UTMB.EDU]
Sent: Sat 11/11/2017 11:23:31 AM (UTC-05:00)
Subject: Re: NAS mtg in Galveston

Wonderful! Thanks so much. We look forward to welcoming you to Galveston and the GNL.
Jim

Sent from my iPhone

On Nov 10, 2017, at 7:05 PM, Baric, Ralph S <rbaric@email.unc.edu> wrote:

Hi Jim and James, I do plan to attend. Greatly appreciate the invitation. Sorry for the delay in responding. ralph

---

From: LeDuc, James W. [mailto:jwleduc@UTMB.EDU]
Sent: Friday, November 10, 2017 5:02 PM
To: Baric, Ralph S <rbaric@email.unc.edu>
Cc: Benjamin Rusek (BRusek@nas.edu) <BRusek@nas.edu>
Subject: NAS mtg in Galveston
Importance: High

Hi Ralph,

I think that Ben has extended an invitation to you on behalf of the US National Academy of Sciences to join us at the GNL in Galveston for a meeting with participants from the Chinese Academies of Sciences, 16-18 Jan 2018. This will be similar to the meeting held in Beijing a couple of years ago in which you participated. I know that one of the Chinese leaders in coronavirus research is planning on attending and we hope that you will be able to come and offer a brief talk in this area as well. Please let us know at your earliest convenience if you can make it.

I look forward to welcoming you to Galveston!

Best regards,

Jim

James W. Le Duc, Ph.D.
Director
Galveston National Laboratory
University of Texas Medical Branch
Galveston, TX 77555-0610
(t)
(f)
(m)

To: Shi, Pei yong (peshi@UTMB.EDU)[peshi@UTMB.EDU]; Colleen Kraft[colleen.kraft@emory.edu]; jaime@openphilanthropy.org[jaime@openphilanthropy.org]; Dave Franz
Ralph S[rbaric@email.unc.edu]; Carol.linden@fda.hhs.gov[Carol.linden@fda.hhs.gov]; 'David A Relman'[relman@stanford.edu]; Swayne, David (David.Swayne@ARS.USDA.GOV)[David.Swayne@ARS.USDA.GOV]
Cc: jwleduc@UTMB.EDU[jwleduc@UTMB.EDU]; Holubar, Connie J. (cjholuba@UTMB.EDU)[cjholuba@UTMB.EDU]; Baric, Toni C[antoinette_baric@med.unc.edu]; Shi, Pei yong (peshi@UTMB.EDU)[peshi@UTMB.EDU]; Morgan, LaTasha[LMorgan@nas.edu]; Lowenthal, Micah[mlowenth@nas.edu]
From: Rusek, Benjamin[BRusek@nas.edu]
Sent: Fri 1/12/2018 5:43:43 PM (UTC-05:00)
Subject: Agenda and travel info for upcoming Galveston, Texas meeting
NAS-CAS mtg Galveston Agenda_FINAL_Jan12 v2.docx
Galveston Meeting Travel Memo US.docx

Greetings,

The latest agenda for the *China-U.S. Workshop on the Challenges of Emerging Infections, Laboratory Safety and Global Health Security* at the Galveston National Laboratory (GNL) in Galveston, Texas, USA on January 16-18, 2018 is attached.

We have also attached a travel memo **detailing your transportation arrangements between the airport and the hotel in Galveston, Texas** (if you don't have a rental car). **Please note the instructions for finding your ride once you arrive at the airport in Houston, Texas.** The memo also lists your hotel room confirmation number at the **Hotel Galvez** (www.hotelgalvez.com) and additional information about the meeting.

The meeting will start on Tuesday morning, January 16th. Since many participants arrive late on the evening of January 15th we have pushed the reception to January 18th. Bring your ID and be ready to board the bus to the GNL on Tuesday morning at 7:45 AM. Breakfast will be at the GNL.

Again, if you have not already, please email a short one paragraph bio and a profile photo to me for the final program. If you would like us to include an abstract for your talk please send that as well.

Thank you for traveling to and agreeing to participate in what we hope will be an interesting and productive workshop. We look forward to meeting you in Galveston next week!

Kind regards,

Ben

Benjamin J. Rusek
Senior Program Officer
Policy and Global Affairs Division
The U.S. National Academy of Sciences
Phone:
Cell:
Fax:
Skype: l

EXHIBIT 19

EXHIBIT 19

FRANK PALLONE, JR., NEW JERSEY
CHAIRMAN

CATHY McMORRIS RODGERS, WASHINGTON
RANKING MEMBER

ONE HUNDRED SEVENTEENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515–6115
Majority (202) 225–2927
Minority (202) 225–3641

June 10, 2021

The Honorable Francis Collins, M.D., Ph.D.
Director
National Institutes of Health
9000 Rockville Pike
Bethesda, MD 20892

Dear Dr. Collins:

As the committee of jurisdiction over public health, the Energy and Commerce Committee has authorizing responsibilities over the U.S. National Institutes of Health (NIH). We strongly support a comprehensive investigation into the origins of the COVID-19 pandemic, including the possibility of an accidental laboratory leak.

The Chinese Communist government has not yet allowed Chinese scientists to cooperate with an investigation into COVID-19 origins, and has admitted to destroying samples and records pertinent to such an investigation.[1] Thus, it is imperative we assemble all data and information in U.S. possession about bat coronavirus research experiments and lab safety protocols from all sources outside of China, particularly from EcoHealth Alliance (EHA). EHA is an NIH grantee who has been involved in bat coronavirus research in China and has issued grant subawards to the Wuhan Institute of Virology (WIV). It is also essential to collect information about the WIV, the laboratory that was conducting bat coronavirus experiments located in Wuhan, China, the epicenter of the COVID-19 outbreak. As a federal cognizant grant-making agency that funded bat coronavirus research at the WIV through EHA awards, NIH is in a unique position to publicly share detailed research reports in its possession. Importantly, NIH has full access to EHA records and EHA has refused to cooperate with our inquiry. Therefore, it is critical for NIH to cooperate with our objective fact-finding investigation as we continue to collect data about U.S. funded bat coronavirus research.

[1] Josh Chin, *China Told Labs to Destroy Coronavirus Samples to Reduce Safety Risks*, The Wall Street Journal (May 16, 2020) *available at* https://www.wsj.com/articles/china-told-labs-to-destroy-coronavirus-samples-to-reduce-biosafety-risks-11589684291/.

Since the Republican committee leaders March 18, 2021 letter to NIH, our investigation has found a number of additional issues that raise very serious concerns about the adequacy of NIH's oversight of grantees. The following newly found issues appear troubling and given the significance of these concerns, we expect the NIH to respond fully and substantively. Minority committee staff is continuing to work with your staff to schedule an NIH briefing. The NIH should be prepared to address these issues at the briefing, in addition to all of the questions from the March 18, 2021 letter that presently remain unanswered.

1. NIH's Award of $2 million to EHA Despite Grant Suspension

On May 25, 2021, a spokesperson for EHA told Fox Business that its NIH funding is frozen and NIH did not give them guidance on when funds will be unfrozen.[2] EHA's representation about their NIH funding was not forthcoming. NIH terminated grant R01AI110964 to EHA entitled, "Understanding the Risk of Bat Coronavirus Emergence" in April 2020.[3] NIH eventually converted the grant termination to a suspension on July 8, 2020, pending EHA's responses to seven requests from NIH related to WIV's actions. NIH could unfreeze the funding if EHA cooperates with NIH's requests, but apparently EHA has not yet done so. Despite EHA's obstruction of NIH requests, NIH gave new financial awards to EHA in June 2020 and August 2020, totaling $2,127,602.[4] By NIH authorizing new funding to EHA, an NIH-suspended grantee, the NIH undercut its July 8, 2020 suspension and has incentivized its grantees to defy NIH oversight with impunity.

2. NIH's Inadequate Oversight of EHA's Other Support

You testified during a May 25, 2021 Congressional hearing that NIH was, "...of course not aware of other sources of funds or other activities they might have undertaken outside of what our approved grant allowed," when asked about NIH grant recipient EHA, and the WIV, an EHA subaward recipient.[5] Pursuant to the NIH Grants Policy, EHA was required to report all "other support," in-kind contributions such as laboratory space, equipment and supplies, and facilities and other resources for all individuals designated as the Principal Investigator (PI) personnel.[6] Per the NIH grants policy, the grant Principal Investigator Dr. Peter Daszak and EHA were required to report its other research funding sources and activities to NIH.[7] Without

[2] Fox News, *Biden State Department quietly ended team's work probing COVID origin*, State Department (May 25, 2021) *available at* https://www.foxnews.com/politics/biden-state-department-shut-down-team-covid-origin-investigation.
[3] National Institutes of Health, *Understanding the Risk of Bat Coronavirus Emergence*, REPORTER (last accessed June 2, 2021) *available at* https://reporter.nih.gov/search/p1odLH_U1kyZgyOhClrN2w/project-details/9320765#similar-Projects/.
[4] USASpending.gov, *Cooperative agreement numbers U01AI151797 and U01AI153420*, EcoHealth Alliance available at
[5] House Committee on Appropriations, *FY 2022 Budget Request for the National Institutes of Health*, Hearings (May 25, 2021) *available at* https://appropriations.house.gov/events/hearings/fy-2022-budget-request-for-the-national-institutes-of-health.
[6] National Institutes of Health, Other Support, Grants & Funding (last accessed June 1, 2021) available at https://grants.nih.gov/grants/forms/othersupport.htm.
[7] *Id.*

further details or documentation, your testimony bolsters the notion that NIH oversight is largely ignorant of other awards to the grantee.

3. NIH's Inadequate Oversight of EHA's Delinquent Financial Reports

As the prime recipient of NIH grant R01AI110964, EHA gave a total $598,500 in five subaward transactions to the WIV from 2015 to 2019 for the WIV to, "conduct high-quality testing, sequencing, and analyses of field samples; maintenance of cold-chains from field to lab; ensuring quality control of sample storage and testing; collaborating on scientific publications and programmatic reporting."[8] EHA also gave a total of $201,217.10 in two subaward transactions to the Wuhan University School of Public Health (WUSPH) to "conduct targeted site-analyses, human behavioral surveillance including qualitative and quantitative surveys; analyses of data; collaborating on scientific publications and programmatic reporting," from 2016 through 2017.[9]

EHA is required to report its subawards to GSA's FFATA Subaward Reporting System (FSRS) by the end of the month following the month when the subaward was made.[10] For example, when EHA issued a $133,000 subaward to the WIV on May 29, 2015, EHA was required to report that subaward to FSRS by June 30, 2015.[11] USASpending is the U.S. government's open federal spending data source and when the grant number R01AI110964 data is downloaded, details reveal that EHA did not report subawards for that grant until 2020, even though EHA made subawards starting in 2015.[12] EHA reported all seven subaward transactions for R01AI110964 on July 13, 2020, five days following NIH's July 8, 2020 letter to EHA instructing EHA to ensure EHA reported all subaward data to FSRS.[13] Before the year 2020, only one other EHA subaward grant is reported in USASpending.gov, in which three subaward transactions for NIH grant number R56TW009502 are recorded in 2014.[14] EHA's apparent non-compliance of required financial reporting raises concerns about the adequacy of NIH oversight of NIH grants.

4. NIH's Possible Funding of EHA for Duplicative Research in China

EHA received federal funding as both a prime and sub-recipient not only from NIH, but also from the U.S. Agency for International Development (USAID) for its bat coronavirus research. The project descriptions and research articles are so similar that a distinction between the NIH bat coronavirus research objectives and achievements for the awards to EHA are almost interchangeable with EHA's USAID-funded bat coronavirus research objectives and

[8] *Id.*
[9] *Id.*
[10] USAspending.gov, *Data Sources,* About (last accessed June 1, 2021), *available at* https://www.usaspending.gov/about.
[11] *Id.*
[12] USASpending.gov, *Advanced Search: Recipient – EcoHealth Alliance* (June 1, 2021) *available at* USASpending.gov/.
[13] *Id.*
[14] *Id.* See NIH grant number R56TW009502.

achievements.[15] The NIH grant progress reports will reveal details about the bat coronavirus research that can be compared to the reports from USAID-funded research. In its research funded by the USAID, EHA partnered with the WIV and with East China Normal University.[16] We are very concerned that the NIH and USAID may have funded duplicate projects and that EHA partnered with additional unreported entities in China for NIH-funded research.

5. NIH's Inadequate Reconciliation of EHA's Grant Subawards

As far back as 2005, Peter Daszak of EHA has authored over 20 bat coronavirus and other zoonic pathogen research articles with Dr. Zhengli Shi of the WIV, plus other researchers, about experiments funded by NIH.[17] Their collaborative research has resulted in a 2005 publication entitled "Bats Are Natural Reservoirs of SARS-Like Coronaviruses," funded by NIH.[18] In 2013, they published "Isolation and characterization of a bat SARS-like coronavirus that uses the ACE2 receptor," funded by NIH and USAID. [19] Their numerous publications acknowledge NIH as a research sponsor yet the only EHA support to the WIV in USASpending.gov was reported by EHA on July 13, 2020 (see concern number three above).[20] Vanity Fair reported that Dr. Shi "herself listed U.S. government grant support of more than $1.2 million on her curriculum vitae: $665,000 from the NIH between 2014 and 2019; and $559,500 over the same period from USAID."[21] EHA's late and potentially incomplete reporting of the WIV as its sub-award recipient raises questions about EHA's compliance with required financial reporting and also raises concerns about NIH's oversight of grant awards to EHA.

6. NIH's Inadequate Oversight of EHA's Place of Performance Reporting

The Federal Funding Accountability and Transparency Act of 2006 (FFATA) requires that federal award reporting must include the primary location of where the work will be performed, (including the city, state, congressional district, and country).[22] For EHA's NIH awards, China is not listed as the place of performance in USASpending.gov and instead, EHA's

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[15] USASpending.gov, *Advanced Search: Recipient – EcoHealth Alliance* (June 1, 2021) *available at* USASpending.gov/.
[16] USAID PREDICT-1 CONSORTIUM, *Reducing Pandemic Risk, Promoting Global Health*, Final Report (Dec. 2014) *available at* https://ohi.sf.ucdavis.edu/sites/g/files/dgvnsk5251/files/files/page/predict-final-report-lo.pdf.
[17] NIH Reporter, *Anthropogenic change & emerging zoonic paramyxoviruses*, Project Number 5R01TW005869-04 (Budget Start Date June 1, 2005) *available at* https://reporter.nih.gov/search/WMYBIQPE20aG4fAZLFj0lw/project-details/6923645#details, NIH National Library of Medicine, *Advanced Search for 'Shi, Daszak,'* National Center for Biotechnology Information (June 2, 2021) *available at* https://pubmed.ncbi.nlm.nih.gov/?term=Daszak%2C+Shi&sort=date&sort_order=asc&size=200.
[18] NIH National Library of Medicine, *Bats Are Natural Reservoirs of SARS-Like Coronaviruses*, PubMed (Sept.5, 2005) *available at* https://pubmed.ncbi.nlm.nih.gov/16195424/.
[19] Ge, XY., *et al., Isolation and characterization of a bat SARS-like coronavirus that uses the ACE2 receptor*, Nature 503, 535–538 (May 16, 2013) *available at* https://doi.org/10.1038/nature12711.
[20] *Id.*
[21] Katherine Eban, The Lab-Leak Theory – Inside the Fight to Uncover COVID-19 Origins, Vanity Fair (June 3, 2021) *available at* https://www.vanityfair.com/news/2021/06/the-lab-leak-theory-inside-the-fight-to-uncover-covid-19s-origins.
[22] PL 109-282, Sept. 26, 2006 *available at* https://www.govinfo.gov/content/pkg/PLAW-109publ282/pdf/PLAW-109publ282.pdf.

primary place of performance is identified as New York.[23] The NIH grant documents, and the financial and progress reports we have requested will contain travel budgets and research details that will confirm the location(s) where EHA actually performed its research. Published research articles about NIH-funded experiments describe EHA's bat coronavirus research and surveillance activities often partnered with the WIV in China. We are very concerned about the discrepancy in EHA's primary place of performance as being New York in USASpending.gov when research articles, publications, and media interviews suggest EHA's primary place of performance is not domestic.[24]

7. NIH's Lack of Visibility into EHA's Grant Subawards

USASpending.gov limits visible data to prime and subaward recipients, and does not disclose funds that are further disbursed subaward recipients.[25] EHA is a subaward recipient of NIH grant funds from the Arizona State University and the Trustees of Columbia University in New York City.[26] As a subaward recipient, EHA does not publicly report when it further distributes subaward funds to other organizations such as the WIV or other recipients in China.[27] NIH questions to EHA in the July 8, 2020 grant suspension letter suggest that NIH lacks information and visibility on sub-grant awards that are either issued or received by EHA.[28]

8. NIH's Inadequate Oversight of EHA's Grant Fund Accounting

In our April 18, 2021 letter to EHA, we raised the issue that EHA reported a $319,570 cash award grant and a $126,792 cash award grant disbursed by wire to China for the purpose of "[u]understanding the risk of bat coronavirus emergence" on its IRS Form 990, calendar year 2016.[29] EHA reported giving $321,700 for coronavirus and emerging diseases to China on its IRS Form 990, calendar year 2015.[30] EHA IRS Form 990's for other years do not include that purpose or identify the WIV as an organization to which funds were paid. With EHA organized as a 501 (c)(3) non-profit organization, its IRS Form 990's are public documents able to be reviewed by NIH. As a non-federal entity that expends more $750,000 or more in federal funds in one year, EHA is required to submit a Single Audit report, previously known as the OMB Circular A-133 audit. The purpose of a Single Audit report is to provide assurance to the Federal Government that a non-federal entity has adequate internal controls in place, and is generally in

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[23] *Id.*
[24] Nidhi Subbaraman, *'Heinous!': Coronavirus researcher shut down for Wuhan-lab link slams new funding restrictions*, Nature (Aug. 21, 2020), *available at* https://www.nature.com/articles/d41586-020-02473-4.
[25] USASpending.gov, *Advanced Search: Recipient - EcoHealth Alliance* (June 1, 2021) *available at* USASpending.gov/.
[26] *Id.*
[27] *Id.*
[28] Internal Revenue Service, EHA 990 final, Schedule F, Parts I and II (May 3, 2017) *available at* https://apps.irs.gov/pub/epostcard/cor/311726494_201606_990_2017090514700974.pdf.
[29] U.S. Energy and Commerce Republicans, *Letter to EcoHealth Alliance*, The COVID-19 Origins Investigation (Apr. 16, 2021) *available at* https://republicans-energycommerce.house.gov/the-covid-19-origins-investigation/.
[30] Internal Revenue Service, *EHA 990 final 2015, Schedule F, Parts I and II* (May 3, 2017) *available at* https://apps.irs.gov/pub/epostcard/cor/311726494_201606_990_2017090514700974.pdf.

compliance with program requirements.[31] In EHA's Single Audit reports for years 2016 to 2020, no payments are evident for EHA funds paid to the WIV.[32]

9. NIH's Inadequate Oversight of Its Funded Researchers in China

The WIV named NIH and EHA on its website as WIV international partner as of and prior to the date of our March 18, 2021 letter to NIH.[33] By March 22, 2021, the WIV had removed NIH as a partner from its website.[34] The NIH has characterized its relationship Chinese scientists as respectable scientific partners.[35] However, within three days following our letter to NIH which inquired about NIH grants to the WIV, the WIV quickly concealed its long-standing relationship with NIH by deleting evidence of its NIH partnership from its website. This action does not seem consistent with NIH's claim that the WIV and its scientists were a respectable scientific partner. It has been reported that some Chinese scientists working with EHA are current or former members of the People's Liberation Army of China.[36] It has also been reported that the Chinese military were conducting research at the WIV.[37] We are concerned that NIH-funded coronavirus research in China may not have undergone proper biodefense risk analysis.

10. NIH's Lack of Cooperation with Congressional Oversight Inquiry

NIH is supposed to be a transparent institution and the grant documents we requested should be a matter of public record.[38] Contrary to your public statement implying that we asked for "pretty sensitive materials, not quite classified, but getting close to that," the grant documents we requested are releasable to the public per NIH's own policy and should have already been provided to us.[39]

As you are aware, the NIH grant documents and progress reports we requested will include details pertinent to our COVID-19 origins investigation, including information about: all research participants and collaborating organizations; location(s) of work performed; instruments, equipment and monies provided to grant sub-recipients; financial accounting

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[31] U.S. Department of Health and Human Services, *Single Audit* (Apr. 25, 2016) *available at* (https://www.hhs.gov/about/agencies/asfr/data-act-program-management-office/single-audit/index.html.

[32] Federal Audit Clearinghouse, *EcoHealth Alliance, Inc and Wildlife Preservation Trust Int. Single Audit Reports 2017-2021* (June7, 2021) *available at* https://facdissem.census.gov/SearchResults.aspx.

[33] Internet Archive Wayback Machine, *Wuhan Institute of Virology, CAS*, Partnerships (Mar. 18, 2021) *available at* https://web.archive.org/web/20210318052528/http://english.whiov.cas.cn/International_Cooperation2016/Partnerships/.

[34] Internet Archive Wayback Machine, *Wuhan Institute of Virology, CAS*, Partnerships (Mar. 22, 2021) *available at* https://web.archive.org/web/20210322053537/http://english.whiov.cas.cn/International_Cooperation2016/Partnerships/

[35] House Committee on Appropriations, *FY 2022 Budget Request for the National Institutes of Health*, Hearings (May 25, 2021) *available at* https://appropriations.house.gov/events/hearings/fy-2022-budget-request-for-the-national-institutes-of-health.

[36] Alexis, Shi Zhengli: Weaponizing Coronaviruses, with Pentagon Funding, at a Chinese Military Lab, https://enviroshop.com/shi-zhengli-weaponizing-coronaviruses-with-pentagon-funding-at-a-chinese-military-lab/

[37] *Id.*

[38] National Institutes of Health, *NIH Grants Policy Statement*, Policy and Compliance (June 1, 2021) *available at* https://grants.nih.gov/policy/nihgps/index.htm.

[39] *Id.*

reports; research techniques and accomplishments; research products such as: technologies, patent applications, data or databases, physical collections, and models; significant changes in use or care of human subjects, vertebrate animals, biohazards, and/or select agents; and budgetary information and project outcomes.[40]

As the federal grant awarding agency, NIH must have the right of access to any of EHA's documents or other records which are pertinent to NIH federal awards.[41] The NIH grants policy states that the Freedom of Information Act (FOIA) and U.S. Department of Health and Human Services regulations require NIH to release certain grant documents and records requested by members of the public, regardless of the intended use of the information.[42] Per NIH policy, NIH will generally release funded applications and progress reports pursuant to a FOIA request.[43] NIH considers most grant-related information in the application or post-award phases as being public information (emphasis added).[44]

In support of this inquiry and the public interest in the origins of the COVID-19 pandemic, please provide written responses to the following by June 24, 2021:

1. We again renew our request for NIH's immediate compliance with our oversight inquiry for production of the grant documents and progress reports forthwith that we first requested on March 18, 2021.

2. What is NIH's policy for awarding funds to organizations when the organization has NIH grant funds in suspended status and are not cooperating NIH requests? If the NIH permits new award funding under these circumstances, please provide the policy, and explain how such funding does not undercut NIH's ability to oversee grantees and does not incentivize grantees to defy NIH's requests for information.

3. Please explain all oversight steps NIH has taken to ensure EHA's full compliance with federal financial subaward reporting requirements for all NIH grants. Please explain if EHA reported to NIH any subaward recipients other than the WIV or the WUSPH for NIH grant R01AI110964. Please provide all financial records of all NIH funds given to Dr. Zhengli Shi of the WIV.

4. For all NIH awards in which EHA was a subrecipient, please provide a financial accounting of EHA's subawards to the WIV or other organizations in China.

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[40] Hugh Hewitt, *Dr. Francis Collis On The U.S. Funding of the Wuhan Lab and Congressional Oversight,* The Hugh Hewitt Show (June 2, 2021) *available at* https://hughhewitt.com/dr-francis-collins-on-the-u-s-funding-of-the-wuhan-lab-and-congressional-oversight/, National Institutes of Health, *Research Performance Progress Report,* Grants & Funding (May 4, 2021) *available at* https://grants.nih.gov/grants/rppr/index.htm.
[41] *Id.*
[42] National Institutes of Health, *NIH Grants Policy Statement,* Policy and Compliance (June 1, 2021) *available at* https://grants.nih.gov/policy/nihgps/index.htm.
[43] *Id.*
[44] *Id.*

5. How does NIH ensure it does not award unapproved duplicate grants for same or similar research already funded by other agencies, to EHA or other NIH grant recipients? For all NIH awards to EHA, please provide accounting information for EHA subawards to recipients in China.

6. Please explain how NIH has reviewed EHA annual Single Audit reports to ensure how EHA has met program and reporting requirements.

7. How does NIH audit the financial reports submitted to the IRS by its 501(c)(3) non-profit organization grant award recipients to ensure NIH awards are accurately reported? How does NIH ensure its grantees do not act as a pass-through or money laundering provider to send U.S. research funding to China?

8. Please explain NIH's policy for ensuring its awardees accurately report the actual place of research performance. For all NIH-funded research, please provide all China site locations where EHA's work was performed.

9. Please explain if EHA reported its other funding or in-kind support, including awards from federal agency, to NIH. Please explain if EHA reported any support from organizations in China.

10. Did NIH perform a biodefense risk analysis for coronavirus research conducted at the WIV as research with potential for dual use of research concern, pandemic pathogen or bioweapon development, as outlined in the HHS *Framework for Guiding Funding Decisions about Proposed Research Involving Enhanced Potential Pandemic Pathogens*?[45] Please describe NIH's coordination procedures with the U.S. Intelligence Community that are completed before NIH funds research projects in foreign countries with existing biodefense programs.

Please make arrangements to schedule the briefing for Committee staff by June 24, 2021. If you have any questions, please contact Alan Slobodin or Diane Cutler of the Minority Committee staff. Thank you for your attention to this request.

Sincerely,

Cathy McMorris Rodgers
Republican Leader
Committee on Energy and Commerce

Fred Upton
Republican Leader
Subcommittee on Energy

[45] U.S. Department of Health and Human Services, *Framework for Guiding Funding Decisions about Proposed Research Involving Enhanced Potential Pandemic Pathogens*, Science Safety Security (Dec. 2017) *available at* https://www.phe.gov/s3/dualuse/Pages/p3co.aspx.

Bob Latta
Republican Leader
Subcommittee on Communications and Technology

Brett Guthrie
Republican Leader
Subcommittee on Health

David McKinley
Republican Leader
Subcommittee on Environment and Climate Change

H. Morgan Griffith
Republican Leader
Subcommittee on Oversight and Investigations

Gus Bilirakis
Republican Leader
Subcommittee on Consumer Protection and Commerce

Michael C. Burgess, M.D.
Member of Congress

Steve Scalise
Member of Congress

Adam Kinzinger
Member of Congress

Bill Johnson
Member of Congress

Billy Long
Member of Congress

Larry Bucshon, M.D.
Member of Congress

Markwayne Mullin
Member of Congress

Richard Hudson
Member of Congress

Tim Walberg
Member of Congress

Earl L. "Buddy" Carter
Member of Congress

Jeff Duncan
Member of Congress

Gary Palmer
Member of Congress

Neal P. Dunn, M.D.
Member of Congress

John Curtis
Member of Congress

Debbie Lesko
Member of Congress

Greg Pence
Member of Congress

Dan Crenshaw
Member of Congress

John Joyce, M.D.
Member of Congress

Kelly Armstrong
Member of Congress

EXHIBIT 20

EXHIBIT 20

FRANK PALLONE, JR., NEW JERSEY
CHAIRMAN

CATHY McMORRIS RODGERS, WASHINGTON
RANKING MEMBER

ONE HUNDRED SEVENTEENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE

2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115
Majority (202) 225-2927

November 30, 2022

Lawrence A. Tabak, D.D.S, Ph.D.
Senior Official Performing the Duties of the Director
National Institutes of Health
9000 Rockville Pike
Bethesda, MD 20892

Dr. Tabak:

We write to urge the National Institutes of Health (NIH) to respond to our longstanding requests to provide us information related to the origins of the COVID-19 pandemic, including matters related to National Institute of Allergy and Infectious Diseases' (NIAID) grant to EcoHealth Alliance and subgrant to the Wuhan Institute of Virology (WIV), and other subjects. Some of these requests have been outstanding for more than a year. NIH's persistent lack of transparency with members of its authorizing committee of jurisdiction is troubling. According to its mission statement, a goal of the National Institutes of Health (NIH) is "to exemplify [...] the highest level of scientific integrity and public accountability."[1] However, given the overall lack of adequate responsiveness to our oversight letters, the NIH is falling short of the goal set forth in its mission statement.

Between March 18, 2021 through October 31, 2022, we sent a total of twelve letters requesting information from NIH that have gone largely unanswered related to the origins of COVID-19 and NIH's grant to EcoHealth Alliance, and three other topics.[2] As a convenient reminder, we courteously summarize each of those letters below:

[1] National Institutes of Health, Mission and Goals, What We Do (accessed July 14, 2021) available at https://www.nih.gov/about-nih/what-we-do/mission-goals.

[2] Letter from Committee Ranking Members (Full and Subcommittees, respectively) Cathy McMorris Rodgers, Brett Guthrie, Morgan Griffith to Francis Collins, M.D., Ph.D., Director, NIH (March 18, 2021); Letter from Committee Ranking Members (Full and Subcommittees, respectively) Cathy McMorris Rodgers, Brett Guthrie, Morgan Griffith et al to Francis Collins, M.D., Ph.D., Director, NIH (June 10, 2021); Letter from Committee Ranking Members (Full and Subcommittees, respectively) Cathy McMorris Rodgers, Brett Guthrie, Morgan Griffith to Francis Collins, M.D., Ph.D., Director, NIH (July 21, 2021); Letter from Committee Ranking Members (Full and Subcommittees, respectively) Cathy McMorris Rodgers, Brett Guthrie, Morgan Griffith to Francis Collins, M.D., Ph.D., Director, NIH (August 24, 2021); Letter from Committee Ranking Members (Full and Subcommittees, respectively) Cathy

March 18, 2021, Letter to Dr. Francis Collins:

On March 18, 2021, we sent an eleven-page letter, based on what was known at that time, requesting information related to where SARS CoV-2 originated and how NIH grant dollars at the WIV were used.[3] We asked NIH to provide responses by April 19, 2021.[4] Notably, on April 28, 2021, at a hearing before this Committee's Subcommittee on Health, Dr. Francis Collins testified NIH was working diligently to reply to the letter: "And we are working on answers to your letter with 29 questions and 40 footnotes and 11 pages. It is taking us *a little longer than a few days* (emphasis added)."[5] While documents released in response to Freedom of Information Act requests suggest that NIH had prepared a draft written response, NIH never sent us a written response to our questions.

We acknowledge that you provided a briefing to bipartisan committee staff on June 28, 2021, for one hour in response to some of the questions. However, only the first 20 questions were covered. The other questions remain unanswered. As of today's date, November 30, 2022, *622 days later*, NIH has not provided a written response to the questions in the March 18, 2021, letter.

June 10, 2021, Letter to Dr. Francis Collins:

On June 10, 2021, we wrote to strongly express support for a "comprehensive investigation into the origins of the COVID-19 pandemic, including the possibility of an accidental laboratory leak."[6] We identified several concerns related to the financial management and oversight of the NIH grant to EcoHealth Alliance and its subaward recipient, the WIV.[7] We

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McMorris Rodgers, Brett Guthrie, Morgan Griffith to Francis Collins, M.D., Ph.D., Director, NIH (October 27, 2021); Letter from Committee Ranking Members (Full and Subcommittees, respectively) Cathy McMorris Rodgers, Brett Guthrie, Morgan Griffith to Francis Collins, M.D., Ph.D., Director, NIH (February 14, 2022); Letter from Committee Ranking Members (Full and Subcommittees, respectively) Cathy McMorris Rodgers, Brett Guthrie, Morgan Griffith to Lawrence A. Tabak, D.D.S., PhD., Acting Director, NIH (February 24, 2022); Letter from Committee Ranking Members (Full and Subcommittees, respectively) Cathy McMorris Rodgers, Brett Guthrie, Morgan Griffith to Lawrence A. Tabak, D.D.S., PhD., Acting Director, NIH (April 25, 2022); Letter from Committee Ranking Members (Full and Subcommittees, respectively) Cathy McMorris Rodgers, Brett Guthrie, Morgan Griffith to Lawrence A. Tabak, D.D.S., PhD., Acting Director, NIH (July 21, 2022); Letter from Committee Ranking Members (Full and Subcommittees, respectively) Cathy McMorris Rodgers, Morgan Griffith to Lawrence A. Tabak, D.D.S., PhD., Acting Director, NIH (August 11, 2022); Letter from Committee Ranking Members (Full and Subcommittees, respectively) Cathy McMorris Rodgers, Brett Guthrie, Morgan Griffith to Lawrence A. Tabak, D.D.S., PhD., Acting Director, NIH (October 24, 2022); Letter from Committee Ranking Members (Full and Subcommittees, respectively) Cathy McMorris Rodgers, Brett Guthrie, Morgan Griffith to Lawrence A. Tabak, D.D.S., PhD., Acting Director, NIH (October 31, 2022).

[3] Letter from Committee Ranking Members (Full and Subcommittees, respectively) Cathy McMorris Rodgers, Brett Guthrie, Morgan Griffith to Francis Collins, M.D., Ph.D., Director, NIH (March 18, 2021).

[4] *Id.*

[5] *Hearing on the 'the Long Haul: Forging a Path Through the Lingering Effects of Covid-19'*, before the Subcomm. On Health, H. Energy & Commerce Comm. (Apr. 28, 2021), https://energycommerce house.gov/committee-activity/hearings/hearing-on-the-long-haul-forging-a-path-through-the-lingering-effects-of

[6] Letter from Committee Ranking Members (Full and Subcommittees, respectively) Cathy McMorris Rodgers, Brett Guthrie, Morgan Griffith et al to Francis Collins, M.D., Ph.D., Director, NIH (June 10, 2021).

[7] *Id.*

asked for written responses to our questions be submitted by June 24, 2021. To date, NIH has not provided a written response.

July 21, 2021, Letter to Dr. Francis Collins:

On July 21, 2021, we sent another letter reiterating our request for information to our March 2021 letter, which NIH failed to provide substantive written responses to.[8] In addition, the letter requested information, by July 28, 2021, about NIH-supported gain-of-function research involving "humanized mice" as well as briefings from NIAID officials related to a grant award to EcoHealth Alliance, and an NIAID's official visit to WIV.[9] NIH has not provided a written response to the specific questions outlined in the July 2021 letter, although some information has emerged from subsequent NIH correspondence with EcoHealth Alliance.

August 24, 2021, Letter to Dr. Francis Collins:

We submitted an August 2021 letter again requesting information about NIAID's coronavirus grant to EcoHealth Alliance.[10] Specifically, the letter raised concerns about EcoHealth Alliance's oversight of its subgrantee WIV's experiments to ensure compliance with biosafety requirements.[11] The letter further repeated its request that NIAID officials be made available for staff-level briefings and that NIH provide a response by September 7, 2021. To date, NIH has not provided a written response.[12]

October 27, 2021, Letter to Dr. Francis Collins:

Based on documents the Department of Health and Human Services arranged for the Committee to review *in camera*, we highlighted in an October 27, 2021, letter our concerns about NIH's oversight of EcoHealth Alliance's research proposal that purported it was not conducting gain-of-function research.[13] In addition, the letter raised concerns EcoHealth Alliance failed to comply with NIH's grant terms yet continued to receive millions of dollars in grant funds.[14] NIH was asked to reply to our questions by November 10, 2021, but to date, NIH has not submitted a written response to this letter.[15]

February 14, 2022, Letter to Dr. Francis Collins:

On February 14, 2022, we sent a letter about concerns that Dr. Collins, while Director of NIH, may have taken steps to actively suppress scientific discussion that COVID-19 could have

[8] Letter from Committee Ranking Members (Full and Subcommittees, respectively) Cathy McMorris Rodgers, Brett Guthrie, Morgan Griffith to Francis Collins, M.D., Ph.D., Director, NIH (July 21, 2021).
[9] *Id.*
[10] Letter from Committee Ranking Members (Full and Subcommittees, respectively) Cathy McMorris Rodgers, Brett Guthrie, Morgan Griffith to Francis Collins, M.D., Ph.D., Director, NIH (Aug. 24, 2021).
[11] *Id.*
[12] *Id.*
[13] Letter from Committee Ranking Members (Full and Subcommittees, respectively) Cathy McMorris Rodgers, Brett Guthrie, Morgan Griffith to Francis Collins, M.D., Ph.D., Director, NIH (Oct. 27, 2021)
[14] *Id.*
[15] *Id.*

originated from a research-related incident, not just from natural transmission.[16] We asked Dr. Collins for written responses to a series of questions by February 28, 2022, which to date, he has avoided answering.[17] A similar letter was also sent to Dr. Anthony Fauci, the Director of the NIAID. To date, neither NIH nor NIAID have submitted written responses to these letters.

February 24, 2022, Letter to Dr. Lawrence A. Tabak:

On February 24, 2022, we raised concerns with you that NIH failed to effectively enforce its policies and regulations over EcoHealth Alliance.[18] Specifically, EcoHealth withheld attribution of data to another federal grant from NIH, raising the possibility it was double-billing two federal agencies for the same research. Additionally, EcoHealth Alliance's inability to provide laboratory notebooks and electronic files called into question the safety of the research conducted on humanized mice.[19] Additionally, the letter expressed that, in contravention of federal regulations regarding financial disclosures, EcoHealth Alliance may have hidden from NIH the identities of its private donors. Several questions were requested to be answered by March 24, 2022. To date, NIH has not sent a written response.

April 25, 2022, Letter to Dr. Lawrence A. Tabak:

On April 25, 2022, we wrote to you raising concerns that EcoHealth Alliance was potentially omitting key information in research allegedly conducted at WIV in order to obtain a renewal of federal grant funding.[20] Specifically, information related to mice deaths (the higher death rates with mice infected by chimeric viruses, a supposedly unexpected result) may have been withheld from peer reviewers during the grant renewal's application.[21] These nondisclosures may have prevented peer reviewers from examining the complete research findings, thereby preventing them from questioning the riskiness of the experiments conducted with federal grant funds.[22] While NIH has provided some information in a bipartisan briefing, many questions remain unanswered. NIH has not provided a written response to this letter.

July 21, 2022, Letter to Dr. Lawrence A. Tabak:

Although required by the NIH Reform Act of 2006, NIH has failed to convene the Scientific Management Review Board (SMRB) since 2015.[23] We wrote asking why this Board, intended to make NIH more efficient and effective, inexplicably stopped convening seven years ago.[24] In addition, we questioned whether funding intended for the SMRB, $488,901 per year,

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[16] Letter from Committee Ranking Members (Full and Subcommittees, respectively) Cathy McMorris Rodgers, Brett Guthrie, Morgan Griffith to Francis Collins, M.D., Ph.D., Director, NIH (Feb. 14, 2022).
[17] *Id.*
[18] Letter from Committee Ranking Members (Full and Subcommittees, respectively) Cathy McMorris Rodgers, Brett Guthrie, Morgan Griffith to Lawrence A. Tabak, D.D.S., PhD., Acting Director, NIH (Feb. 24, 2022).
[19] *Id.*
[20] Letter from Committee Ranking Members (Full and Subcommittees, respectively) Cathy McMorris Rodgers, Brett Guthrie, Morgan Griffith to Lawrence A. Tabak, D.D.S., PhD., Acting Director, NIH (Apr. 25, 2022).
[21] *Id.*
[22] *Id.*
[23] Letter from Committee Ranking Members (Full and Subcommittees, respectively) Cathy McMorris Rodgers, Brett Guthrie, Morgan Griffith to Lawrence A. Tabak, D.D.S., PhD., Acting Director, NIH (July 21, 2022).
[24] *Id.*

was being diverted elsewhere for the past seven years, thereby totaling $2.9 million.[25] To date, NIH has not provided a written response.

August 11, 2022, Letter to Dr. Lawrence A. Tabak:

As highlighted in our August 11, 2022, letter, we received inadequate responses in 2021 as to why NIH failed to remove an alleged sexual perpetrator disciplined in three states from co-chairing an NIH steering committee, even after receiving complaints from female scientists alleging the misconduct.[26] We reported that the high volume of harassment complaints lodged against NIH grantees and NIH-supported researchers and raised questions about the NIH's handling of such complaints.[27] We requested you provide written responses to our requests by September 12, 2022. To date, NIH has not provided a written response.

October 24, 2022, Letter to Dr. Lawrence A. Tabak:

Last month we sent you a letter raising concerns about how NIH could contemplate funding a new EcoHealth Alliance grant considering this organization's past noncompliance with regulatory requirements and grant terms.[28] As we noted, EcoHealth Alliance's history of failing to substantiate scientific experiments with material records and its slipshod oversight of its sub awardee, the WIV, should have caused NIH to conclude that EcoHealth Alliance could not be a responsible steward of federal grant funding.[29] We submitted several questions for you to answer by November 7, 2022, regarding the NIH's decision to renew its funding of EcoHealth Alliance.[30] To date, we have not received a written response from NIH to this letter.

October 31, 2022, Letter to Dr. Lawrence A. Tabak:

Last month we sent you a letter requesting information related to a NIAID intramural experiment that would enhance the more dangerous version of the monkeypox virus by making the disease about 1000 percent more lethal in mice.[31] The more lethal monkeypox virus has about a 10 percent mortality rate in unvaccinated people whereas the less lethal monkeypox virus has a mortality rate of less than one percent.[32] We requested a written response by November 14, 2022. To date, we have not received a response.

We urge you to provide written responses to our longstanding requests from these letters immediately, but no later than December 16, 2022.

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[25] *Id.*
[26] Letter from Committee Ranking Members (Full and Subcommittees, respectively) Cathy McMorris Rodgers, Morgan Griffith to Lawrence A. Tabak, D.D.S., PhD., Acting Director, NIH (Aug. 11, 2022).
[27] *Id.*
[28] Letter from Committee Ranking Members (Full and Subcommittees, respectively) Cathy McMorris Rodgers, Brett Guthrie, Morgan Griffith to Lawrence A. Tabak, D.D.S., PhD., Acting Director, NIH (Octo. 24, 2022).
[29] *Id.*
[30] *Id.*
[31] Letter from Committee Ranking Members (Full and Subcommittees, respectively) Cathy McMorris Rodgers, Brett Guthrie, Morgan Griffith to Lawrence A. Tabak, D.D.S., PhD., Acting Director, NIH (Oct. 31, 2022).
[32] Christina L. Hutson, et al., *Dosage Comparison of Congo Basin and West African Strains of Monkeypox Virus using a Prairie Dog Animal Model of Systemic Orthopoxvirus Disease*, 402 VIROLOGY 72-82 (2010), available at https://www.sciencedirect.com/science/article/pii/S0042682210001650?via%3Dihub

Furthermore, this letter serves as a formal request to preserve all existing and future records and materials in your agency's possession relating to the topics addressed in this letter. You should construe this preservation notice as an instruction to take all reasonable steps to prevent the destruction or alteration, whether intentionally or negligently, of all documents, communications, and other information, including electronic information and metadata, that are or may be responsive to this congressional inquiry. This instruction includes all electronic messages sent using official and personal accounts or devices, including records created using text messages, phone-based message applications, or encryption software.

Sincerely,

Cathy McMorris Rodgers
Republican Leader
Committee on Energy and Commerce

Brett Guthrie
Republican Leader
Subcommittee on Health

H. Morgan Griffith
Republican Leader
Subcommittee on Oversight and Investigations

CC: The Honorable Frank Pallone, Chairman
The Honorable Diana DeGette, Chair, Subcommittee on Oversight and Investigations
The Honorable Anna G. Eshoo, Chair, Subcommittee on Health
Dr. Anthony Fauci, M.D., Director, National Institute of Allergy and Infectious Diseases

EXHIBIT 21

EXHIBIT 21

To: Peter Daszak[daszak@ecohealthalliance.org]; Baric, Toni C[antoinette_baric@med.unc.edu]
Cc: Alison Andre[andre@ecohealthalliance.org]; Aleksei Chmura[chmura@ecohealthalliance.org]
From: Baric, Ralph S[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=BB0D9CC80C184735A4E862C3BDD8A15D-RALPH S BAR]
Sent: Thur 2/6/2020 4:01:22 PM (UTC-05:00)
Subject: RE: No need for you to sign the "Statement" Ralph!!

I also think this is a good decision. Otherwise it looks self-serving and we lose impact. ralph

From: Peter Daszak <daszak@ecohealthalliance.org>
Sent: Thursday, February 6, 2020 3:16 PM
To: Baric, Ralph S <rbaric@email.unc.edu>; Baric, Toni C <antoinette_baric@med.unc.edu>
Cc: Alison Andre <andre@ecohealthalliance.org>; Aleksei Chmura <chmura@ecohealthalliance.org>
Subject: No need for you to sign the "Statement" Ralph!!
Importance: High

I spoke with Linfa last night about the statement we sent round. He thinks, and I agree with him, that you, me and him should not sign this statement, so it has some distance from us and therefore doesn't work in a counterproductive way.

Jim Hughes, Linda Saif, Hume Field, and I believe Rita Colwell will sign it, then I'll send it round some other key people tonight. We'll then put it out in a way that doesn't link it back to our collaboration so we maximize an independent voice.

Cheers,

Peter

Peter Daszak
President

EcoHealth Alliance
460 West 34th Street – 17th Floor
New York, NY 10001

Tel.
Website: www.ecohealthalliance.org
Twitter: @PeterDaszak

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that prevent pandemics and promote conservation.

EXHIBIT 21

EXHIBIT 21

To: Peter Daszak[daszak@ecohealthalliance.org]; Baric, Toni C[antoinette_baric@med.unc.edu]
Cc: Alison Andre[andre@ecohealthalliance.org]; Aleksei Chmura[chmura@ecohealthalliance.org]
From: Baric, Ralph S[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=BB0D9CC80C184735A4E862C3BDD8A15D-RALPH S BAR]
Sent: Thur 2/6/2020 4:01:22 PM (UTC-05:00)
Subject: RE: No need for you to sign the "Statement" Ralph!!

I also think this is a good decision. Otherwise it looks self-serving and we lose impact. ralph

From: Peter Daszak <daszak@ecohealthalliance.org>
Sent: Thursday, February 6, 2020 3:16 PM
To: Baric, Ralph S <rbaric@email.unc.edu>; Baric, Toni C <antoinette_baric@med.unc.edu>
Cc: Alison Andre <andre@ecohealthalliance.org>; Aleksei Chmura <chmura@ecohealthalliance.org>
Subject: No need for you to sign the "Statement" Ralph!!
Importance: High

I spoke with Linfa last night about the statement we sent round. He thinks, and I agree with him, that you, me and him should not sign this statement, so it has some distance from us and therefore doesn't work in a counterproductive way.

Jim Hughes, Linda Saif, Hume Field, and I believe Rita Colwell will sign it, then I'll send it round some other key people tonight. We'll then put it out in a way that doesn't link it back to our collaboration so we maximize an independent voice.

Cheers,

Peter

Peter Daszak
President

EcoHealth Alliance
460 West 34th Street – 17th Floor
New York, NY 10001

Tel.
Website: www.ecohealthalliance.org
Twitter: @PeterDaszak

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that prevent pandemics and promote conservation.

EXHIBIT 23

EXHIBIT 23

DEPARTMENT OF HEALTH & HUMAN SERVICES
Public Health Service

National Institutes of Health
Bethesda, Maryland 20892

August 19, 2022

The Honorable James Comer
Ranking Member, Committee on Oversight and Reform
U.S. House of Representatives
Washington, DC 20515

Dear Representative Comer:

Thank you for your interest in the work of the National Institutes of Health (NIH). I write to you today in a continuing effort to be responsive to your inquiries about NIH oversight of awards to EcoHealth Alliance (EHA).

As you know, the National Institute of Allergy and Infectious Diseases (NIAID) awarded EHA grant R01AI110964 ("R01 award") after the application received a meritorious score through the peer review process. This grant included three sub-awards, including one to the Wuhan Institute of Virology (WIV) and had a performance period starting on June 1, 2014. The renewal application for this grant underwent peer review, and the Notice of Award was issued on July 24, 2019. The research approved under this grant sought to understand how bat coronaviruses evolve naturally in the environment to become transmissible to the human population. This type of research is a critical component of pandemic preparedness. Identifying pathogens that have the potential to cause disease in humans allows the research community to prepare for how to respond if these pathogens do enter the human population.

NIH's Office of Extramural Research (OER) suspended EHA grant R01AI110964 on July 8, 2020, due to grant administrative non-compliance concerns. Over time, NIH reviewed EHA's compliance with requirements under the R01 award and requested information and documentation from EHA to enable NIH to conduct its review.

NIH also reviewed EHA's compliance with requirements under two other NIH awards to EHA, the Research Project Cooperative Agreements ("U awards"). See Table 1 for a list of all current NIH awards to EHA.

Table 1: Current NIH Awards to EHA

Award Number	Grant Title	Performance Period
R01AI110964	Understanding the Risk of Bat Coronavirus Emergence	July 1, 2014-May 31, 2019; Renewal: June 1, 2019-May 31, 2024*

U01AI151797	Understanding Risk of Zoonotic Virus Emergence in Emerging Infectious Disease Hotspots of Southeast Asia	June 17, 2020-May 31, 2025**
U01AI153420	Study of Nipah Virus (NiV) Dynamics and Genetics in Bat Reservoirs and of Human Exposure to NiV Across Bangladesh to Understand Patterns of Human Outbreaks	September 15, 2020-June 30, 2025**

*This grant was suspended on July 8, 2020 and has remained suspended.
**Specific award conditions imposed on January 6, 2022 but was never suspended.

As NIH notified you on January 6, 2022, NIH sent a letter to EHA that day conveying the outcome of its detailed administrative review of compliance under the U awards. NIH identified a number of compliance issues, including inadequate oversight in monitoring the activities of its subawardees, failure to report subawards to the General Services Administration's Federal Subaward Reporting System, and errors in indirect rate charges. In cases of non-compliance, NIH's approach is generally to provide a grantee the opportunity to come into compliance in an effort to preserve the research, when possible. This approach is consistent with HHS grant regulations, which provide that in cases of non-compliance, a funding agency can impose specific award conditions; and if the agency determines that the non-compliance cannot be remedied by specific award conditions, then the agency may take more severe actions, such as terminating an award in whole or in part.

Our January 6, 2022 letter announced immediate imposition of specific award conditions on the U awards to allow NIH to monitor these awards more closely. The U awards were never suspended. In addition, the letter outlined areas where EHA needed to improve its administrative policies and practices. NIH requested EHA submit a Corrective Action Plan (CAP) to address these issues.

EHA provided a proposed CAP to NIH on February 4, 2022. The CAP outlined steps EHA would take to address the non-compliance NIH identified under the two U awards. Between February and April 2022, NIH approved EHA's CAP and EHA implemented the CAP. Pursuant to the CAP, EHA revised the U subaward agreements to include details on EHA's procedures for access to subawardees' records and financial statements, data-sharing and management of awards, and a correction of the Facilities and Administrative cost rate. EHA also provided NIH with new and updated EHA policies that describe how, for all EHA projects, EHA will comply with reporting requirements and other deficiencies identified by NIH.

I write today to update you on EHA's implementation of the CAP under the U awards, the conclusion of NIH's review of compliance under the R01 award, and the next steps NIH will take with EHA. At this time, EHA has successfully implemented the NIH-approved CAP for its active U awards, which includes rewriting subaward agreements, and improving monitoring and reporting conflicts of interest by its subawardees. Accordingly, NIH has determined that EHA was able to resolve the problems identified with those awards. For the R01 award, NIH identified the same issues that were present with the U awards (including inadequate oversight in monitoring the activities of its subawardees, failure to report subawards to the General Services Administration's Federal Subaward Reporting System, and errors in indirect rate charges), as

well as reporting delinquencies, such as the late submission of the fifth year progress report. NIH has determined that these problems can be remedied by imposing specific award conditions, because EHA demonstrated that it could resolve these same problems under the U awards with the successful implementation of a CAP.

However, NIH also identified one non-compliance under the R01 award that cannot be remedied with specific award conditions. NIH has requested on two occasions that EHA provide NIH the laboratory notebooks and original electronic files from the research conducted at WIV. To date, WIV has not provided these records. Under 45 CFR 75.371, "If a non-federal entity fails to comply with federal statutes, regulations, or the terms and conditions of a federal award, the HHS awarding agency or pass-through entity may impose additional conditions, as described in § 75.207. If the HHS awarding agency or pass-through entity determines that non-compliance cannot be remedied by imposing additional conditions, the HHS awarding agency or pass-through entity may take one or more [enforcement] actions, as appropriate in the circumstances[.]" 45 CFR 75.371. Such actions may include partly terminating the federal award. Id. at 75.371(c).

Today, NIH has informed EHA that since WIV is unable to fulfill its duties for the subaward under grant R01AI110964, the WIV subaward is terminated for failure to meet award terms and conditions requiring provision of records to NIH upon request.

In light of the cooperation from EHA and the subsequent substantial improvements in administrative processes that EHA demonstrated with the two U awards, NIAID will begin to engage with EHA to renegotiate the specific aims and objectives of the R01 grant without the involvement of WIV. If an agreement is made, the revised grant will be reviewed again in its entirety to ensure all applicable policy and guideline requirements are met including the HHS Framework for Guiding Funding Decisions about Proposed Research Involving Enhanced Potential Pandemic Pathogens (P3CO) and other relevant policies and guidelines. A revised Notice of Award will be issued, subject to specific award conditions and any additional precautions that may be appropriate for inclusion, and the suspension on the grant will be lifted. If revisions to the grant's aims and objectives cannot be revised to stay within the original peer reviewed, scientific scope of the project, NIH reserves the right to request a bilateral termination of the remainder of the award.

As specific award conditions, NIH will maintain a higher level of oversight over all EHA awards for a minimum of three years, including a doubling of the frequency for the required scientific progress and financial reports, and a requirement that EHA submit additional documents illustrating their subaward monitoring activity. In addition, EHA will be required to conduct onsite inspections of all of its subawardees every six months to confirm that all terms of subaward agreements are being fully and appropriately executed. EHA will also be required to submit updated subaward agreements under the revised R01 award that address the deficiencies identified by NIH.

NIH takes its oversight of grants very seriously and always considers what further measures can be taken to strengthen routine oversight of grants at NIH. In light of this compliance case, NIH has taken additional steps. NIH has incorporated additional automated systems of controls for

the timely receipt of progress reports to ensure that the most recent information is received and accepted by program officers. NIH has implemented program scripts in the NIH grants system (eRA) that send additional reminders to grant recipients and NIH staff of delinquencies if progress reports are either delayed or not fully reviewed and accepted. Should this happen, the system establishes a "red bar" to funding of the next non-competing renewal, which would prevent the award from being processed until the "red bar" is resolved. NIH believes that these new measures will further strengthen our oversight of grantees while continuing the life-saving work done by NIH grantees.

NIH is committed to ensuring responsible stewardship and accurate reporting of the use of federal funds. In a continued effort to be transparent, NIH has attached to this letter the communications between NIH and EHA regarding the implementation of the CAP. I hope this information is helpful to you.

Sincerely,

Michael S. Lauer, M.D.
Deputy Director for Extramural Research
National Institutes of Health

Enclosures:
First letter from NIH to EHA on January 6, 2022
Second letter from NIH to EHA on January 6, 2022
CAP proposed by EHA (in 2 parts)
NIH response to EHA's CAP
Follow-up CAP documents submitted by EHA (in 5 parts)
Letter from NIH to EHA on August 19, 2022

EXHIBIT 24

EXHIBIT 24

FRANK PALLONE, JR., NEW JERSEY
CHAIRMAN

CATHY McMORRIS RODGERS, WASHINGTON
RANKING MEMBER

ONE HUNDRED SEVENTEENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE

2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115
Majority (202) 225-2927
Minority (202) 225-3641

March 18, 2021

The Honorable Francis Collins, M.D., Ph.D.
Director
National Institutes of Health
9000 Rockville Pike
Bethesda, MD 20892

Dear Dr. Collins,

We write to request information, assistance, and needed-leadership from the National Institutes of Health (NIH) to advance an independent, scientific investigation into the origins of the COVID-19 pandemic.

The COVID-19 pandemic has been the worst public health crisis in the U.S. in about a hundred years. Over a year has passed since the deadly virus reached our shores and yet, the origin of the virus has yet to be determined. An independent, expert investigation of the origin of COVID-19 is of paramount importance to public health and biosecurity. As noted by Stanford Medical School Professor David Relman:

> A more complete understanding of the origins of COVID-19 clearly serves the interests of every person in every country on this planet. It will limit further recriminations and diminish the likelihood of conflict; it will lead to more effective responses to this pandemic, as well as efforts to anticipate and prevent the next one. It will also advance our discussions about risky science. And it will do something else: Delineating COVID-19's origin story will help elucidate the nature of our very precarious coexistence within the biosphere.[1]

Recently, the World Health Organization (WHO) attempted to investigate the origin of COVID-19. The WHO said that this investigative mission would be guided by the science, be

[1] David A. Relman, *Opinion: To stop the next pandemic, we need to unravel the origins of COVID-19*, PNAS (Nov. 2020), *available at* https://www.pnas.org/content/117/47/29246.

"open-minded," and "not exclude[e] any hypothesis."[2] Unfortunately, China did not provide complete access or independence for the critical WHO mission. On February 13, 2021, National Security Advisor Jake Sullivan issued the following statement:

> We have deep concerns about the way in which the early findings of the COVID-19 investigation were communicated and questions about the process used to reach them. It is imperative that this report be independent, with expert findings free from intervention or alteration by the Chinese government. To better understand this pandemic and prepare for the next one, China must make available its data from the earliest days of the outbreak.[3]

Because of rising tensions between the U.S. and China, the WHO scrapped plans for an interim report.[4] An international group of science experts, including specialists in virology, microbiology, and zoology, asked for a new review.[5]

The NIH, as a premier scientific institution, must lead in order to foster a transparent, independent, and science-based investigation into the origin of the COVID-19 pandemic. Such an effort must meet the WHO's stated goals of an open-minded investigation that does not exclude any plausible hypothesis.[6] In addition, the NIH is well-positioned to gather and provide information through oversight of its grants and other federal awards. Thus, the NIH is in a unique position to investigate the possibility that the pandemic stemmed from a laboratory accident or leak, especially regarding the Wuhan Institute of Virology (WIV).

NIH raised concerns over a possible link between WIV and the COVID-19 outbreak during its review of federal awards to EcoHealth Alliance, a global environmental health nonprofit organization dedicated to protecting wildlife and public health from the emergence of disease. Of the $13.7 million in federal awards that NIH authorized for EcoHealth Alliance, 17

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[2] Smriti Mallapaty, *Where did COVID come from? WHO investigation begins but faces challenges*, NATURE (Nov. 11, 2020), *available at* https://www.nature.com/articles/d41586-020-03165-9.

[3] The White House, Statement of National Security Advisor Jake Sullivan (Feb. 13, 2021), *available at* https://www.whitehouse.gov/briefing-room/statements-releases/2021/02/13/statement-by-national-security-advisor-jake-sullivan/.

[4] Betsy McKay, Drew Hinshaw and Jeremy Page, *WHO Investigators to Scrap Plans for Interim Report on Probe of Covid-19 Origins*, THE WALL STREET JOURNAL (Mar. 4, 2021), *available at* https://www.wsj.com/articles/who-investigators-to-scrap-interim-report-on-probe-of-covid-19-origins-11614865067?mod=latest_headlines

[5] Jaime Metzl, et al, *Call for a Full and Unrestricted International Forensic Investigation into the Origins of COVID-19* (March 4, 2021), *available at* https://s.wsj.net/public/resources/documents/COVID%20OPEN%20LETTER%20FINAL%20030421%20(1).pdf. The co-organizer of the letter and a WHO advisor on human genome editing, Jaime Metzl, PhD, said there is an eighty-five percent chance the pandemic started with an accidental leak from the WIV or Wuhan CDC laboratory, *available at* https://jamiemetzl.com/origins-of-sars-cov-2/. ("I have no definitive way of proving this thesis but the evidence is, in my view, extremely convincing. If forced to place odds on the confidence of my hypothesis, I would say there's an 85% chance the pandemic started with an accidental leak from the Wuhan Institute of Virology or Wuhan CDC and a 15% chance it began in some other way (in fairness, here is an article making the case for a zoonotic jump "in the wild"). If China keeps preventing a full and unrestricted international forensic investigation into the origins of the pandemic, I believe it is fair to deny Beijing the benefit of the doubt.")

[6] Washington Post Editorial Board, *We're still missing the origin story of this pandemic. China is sitting on the answers*, THE WASHINGTON POST (Feb. 5, 2021), *available at* https://www.washingtonpost.com/opinions/2021/02/05/coronavirus-origins-mystery-china/?arc404=true.

projects sponsored by the National Institute of Allergy and Infectious Disease (NIAID) have provided over $7.9 million in federal awards for research of viral emergence from bats in Southeast Asia.[7] EcoHealth Alliance passed some of its funding to the WIV, and in 2020, NIH made efforts to obtain information from EcoHealth Alliance about WIV related to concerns about the origins of COVID-19. In April 2020, NIH wrote to EcoHealth Alliance and Columbia University about an NIH-funded project entitled, "Understanding the Risk of Bat Coronavirus Emergency:"

> It is our understanding that one of the sub-recipients of the grant funds is the Wuhan Institute of Virology ('WIV'). It is our understanding that WIV studies the interaction between corona viruses and bats. The scientific community believes that the coronavirus causing COVID-19 jumped from bats to humans likely in Wuhan where the COVID-19 pandemic began. There are now allegations that the current crisis was precipitated by the release from WIV of the coronavirus responsible for COVID-19. Given these concerns, we are pursuing suspension of WIV from participation in Federal programs. It is in the public interest that NIH ensure that a sub-recipient has taken all appropriate precautions to prevent the release of pathogens that it is studying. This suspension of the sub-recipient does not affect the remainder of your grant assuming that no grant funds are provided to WIV following receipt of this email during the period of suspension.[8]

In January 2021, the U.S. Department of State issued a fact sheet about the activity at the WIV.[9] Among other revelations, it reported the following:

- The U.S. government has reason to believe that several researchers inside the WIV became sick in autumn 2019, before the first identified case of the outbreak, with symptoms consistent with both COVID-19 and common seasonal illnesses. This raises questions about the credibility of WIV senior researcher Shi Zhengli's public claim that there was "zero infection" among the WIV's staff and students of SARS-CoV-2 or SARS-related viruses.[10]

- Starting in at least 2016, WIV researchers conducted experiments involving RaTG13, the bat coronavirus identified by the WIV in January 2020 as the closest sample to SARS-CoV-2 (96.2 percent similar).[11] There was no indication that this research was suspended at any time prior to the COVID-19 outbreak.

- The WIV has a published record of conducting "gain-of-function" research to engineer chimeric viruses.[12] But the WIV has not been transparent or consistent about its record of

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[7] NIH RePORTER, *Research Portfolio Online Reporting Tools* (queried Mar. 4, 2021), *available at* https://reporter.nih.gov/search/qlYUeI9DIk2JfWUdCcWxcA/projects/charts.
[8] Mark Moore, *NIH investigating Wuhan lab at center of coronavirus pandemic*, NEW YORK POST (Apr. 28, 2020), *available at* https://nypost.com/2020/04/28/nih-investigating-wuhan-lab-at-center-of-coronavirus-pandemic/.
[9] U.S. Department of State, *Fact Sheet: Activity at the Wuhan Institute of Virology*, Office of the Spokesperson (Jan. 15, 2021), *available at* https://2017-2021.state.gov/fact-sheet-activity-at-the-wuhan-institute-of-virology//index.html.
[10] *Id.*
[11] *Id.*
[12] *Id.*

studying viruses similar to the COVID-19 virus, including "RaTG13," which was sampled from a cave in Yunnan Province in 2013 after several miners died of SARS-like illness.[13]

- WHO investigators must have access to the records of the WIV's work on bat and other coronaviruses before the COVID-19 outbreak. As part of a thorough inquiry, they must have a full accounting of why the WIV altered and then removed online records of its work with RaTG13 and other viruses.[14]

- Despite the WIV presenting itself as a civilian institution, the U.S. has determined that the WIV has collaborated on projects with China's military.[15] The WIV has engaged in classified research, including laboratory animal experiments, on behalf of the Chinese military since at least 2017.[16]

- The U.S. and other donors who funded or collaborated on civilian research at the WIV have a right and obligation to determine whether any of our research funding was diverted to secret Chinese military projects at the WIV.[17]

Notably, the State Department's former lead investigator who oversaw the Task Force into the COVID-19 virus origin stated recently that he not only believes the virus escaped from the WIV, but that it may have been the result of research that the Chinese military, or People's Liberation Army, was doing on a bioweapon.[18]

Accordingly, it is imperative to determine not only where SARS-CoV-2 originated, but also how and if NIH's funding and research to projects at the WIV could have contributed to SARS CoV-2. To assist our requests and inquiry, please provide the following by April 19, 2021:

1. An assessment from a classified U.S. Defense Intelligence Agency (DIA) report included the possibility that the origins of SARS CoV-2 could have emerged accidentally from a laboratory in Wuhan, China due to unsafe laboratory practices.[19] The DIA report cited U.S. government and Chinese researchers who found "about 33 percent of the original 41 identified cases did not have direct exposure" to the market.[20] That, along with what is known of the WIV's work in past few years, raised reasonable suspicion that the

[13] *Id.*
[14] *Id.*
[15] *Id.*
[16] *Id.*
[17] *Id.*

[18] Jennifer Griffin, Former top State Dept. investigator says COVID-19 outbreak may have resulted from bioweapons research accident, Fox News (March 13, 2021), *available at* https://www.foxnews.com/world/top-state-official-coronavirus-bioweapon-accident

[19] Fred Guterl, Naveed Jamali and Tom O'Connor, *The Controversial Experiments ad Wuhan Lab Suspected of Starting the Coronavirus Pandemic*, NEWSWEEK (Apr. 27, 2020), *available at* https://www.newsweek.com/controversial-wuhan-lab-experiments-that-may-have-started-coronavirus-pandemic-1500503.
[20] *Id.*

pandemic may have been caused by a lab error, not a wet market.[21] Further, a WHO inspector on the recent mission noted that "we know not all of those first 174 early COVID-19 cases visited the market, including the man diagnosed in December 2019 with the earliest onset date."[22] What information does the NIH have on the earliest COVID-19 cases?

2. According to an editorial on February 23, 2021, in *The Wall Street Journal* by former Secretary of State Mike Pompeo and Miles Yu, "[China's] army of scientists claim to have discovered almost 2,000 new viruses in a little over a decade."[23] How many of these discovered viruses does the NIH have information on and were any of these viruses discovered at the WIV?

3. According to *The Wall Street Journal* editorial mentioned in the previous question, some have alleged that the WIV's virus-carrying animals were sold as pets and may even show up at local wet markets.[24] Is the NIH aware of these allegations? If so, please provide any information the NIH has related to these allegations.

4. Please provide all information that NIH has about laboratory accidents and/or biosafety practices at the WIV since January 1, 2015.

5. Please provide all information that NIH has from NIH staff, grantees, sub-grantees, contractors, or subcontractors about communications and events at the WIV from August 2019 to the present.

6. Please provide all information that NIH has from NIH staff, grantees, sub-grantees, contractors, or subcontractors about their communications with China-based NIH, Chinese National Science Foundation, CDC, and China CDC about events at the WIV from August 2019 to the present.

State Department Cables

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[21] *Id.*

[22] Dominic Dwyer, I was the Australian doctor on the WHO's COVID-19 mission to China. Here's what we found about the origins of the coronavirus, THE CONVERSATION (Feb. 21, 2021), *available at*https://www.theguardian.com/commentisfree/2021/feb/22/i-was-on-the-whos-covid-mission-to-china-heres-what-we-found. *See also* Jeremy Page and Drew Hinshaw, *China Refuses to Give WHO Raw Data on Early Covid-19 Cases*, THE WALL STREET JOURNAL (Feb. 12, 2021), *available at* https://www.wsj.com/articles/china-refuses-to-give-who-raw-data-on-early-covid-19-cases-11613150580#:~:text=BEIJING%E2%80%94Chinese%20authorities%20refused%20to,over%20the%20lack%20of%20detail. ("Chinese authorities refused to provide World Health Organization investigators with raw, personalized data on early Covid-19 cases that could help them determine how and when the coronavirus first began to spread in China, according to WHO investigators who described heated exchanges over the lack of detail. The Chinese authorities turned down requests to provide such data on 174 cases of Covid-19 that they have identified from the early phase of the outbreak in the Chinese city of Wuhan in December 2019. Investigators are part of a WHO team that this week completed a monthlong mission in China aimed at determining the origins of the pandemic.")

[23] *Id.*

[24] Mike Pompeo and Miles Yu, *NIH Presses U.S. Nonprofit for Information on Wuhan Virology Lab,* THE WALL STREET JOURNAL (Feb. 23, 2021), available at https://www.wsj.com/articles/chinas-reckless-labs-put-the-world-at-risk-11614102828.

7. What information does NIH have about the WIV's responses to the 2018 U.S. Department of State cables (attached to this letter) regarding safety concerns?

8. The April 2018 cable from the U.S. Department of State stated that the WIV planned to invite University of Texas Medical Branch Galveston (UTMBG) researchers to do research in Wuhan's labs. Please provide any information NIH received that indicates whether the WIV invited UTMBG researchers, and whether UTMBG researchers conducted any research in Wuhan's labs.

    a. If there was such research, please provide information and any documents related to this research.

9. Why was it pertinent to the NIH investigation that the "nonprofit [EcoHealth Alliance] must provide the "WIV's responses to the 2018 Department of State cables regarding safety concerns"?[25]

    a. Did EcoHealth Alliance provide this information? If so, how did NIH use the information to further its investigation?

EcoHealth Alliance, Columbia University Health Sciences

10. Was the 2019 NIH federal award to EcoHealth Alliance reviewed and approved by the HHS Potential Pandemic Pathogen Care and Oversight (P3CO) committee?[26]

    a. If so, please provide the documentation with the committee's decision.

    b. Please also provide the names of the individuals who were members of the committee at the time.

11. Please provide all correspondence and communications between NIH and EcoHealth Alliance, since January 1, 2020, related to federal funding involving the WIV. The documentation should include, but not be limited to, correspondence between NIH and EcoHealth Alliance dated sometime in April 2020, on July 8, 2020, and sometime in August 2020.

12. In April 2020, NIH suspended a 2019 federal award to EcoHealth Alliance, in part, because NIH did not believe the work aligned with "program goals and agency priorities."[27] Please specify the work that was done by the EcoHealth Alliance that did

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[25] Meredith Wadman, *NIH imposes 'outrageous' conditions on resuming coronavirus grant targeted by Trump*, SCIENCEMAG (Aug. 19, 2020), *available at* https://www.sciencemag.org/news/2020/08/nih-imposes-outrageous-conditions-resuming-coronavirus-grant-targeted-trump.
[26] National Institutes of Health, *Notice Announcing the Removal of the Funding Pause for Gain-of-Function Research Project* (Dec. 19, 2017), *available at* https://grants.nih.gov/grants/guide/notice-files/NOT-OD-17-071.html.
[27] *Id.*

not align with the agency's program goals and priorities, and when that work was conducted.

a. Was an evaluation of EcoHealth Alliance's work and whether it aligned with the agency's program goals and priorities conducted by the NIH before the award was issued? If yes, please provide any related documentation. If not, why not?

13. In April 2020 correspondence with EcoHealth Alliance, NIH wrote that it "received reports that the Wuhan Institute of Virology…has been conducting research at its facilities in China that pose serious bio-safety concerns."[28] What are the sources for those reports to NIH and what were the specific allegations reported?

14. Why did the NIH request that EcoHealth Alliance provide a sample of the pandemic coronavirus that the WIV used to determine its genetic sequence for SARS CoV-2?[29]

a. Why is this information important to NIH's investigation?

b. Has NIH obtained the sample and if so, what evaluations have been done, and for what purpose?

c. If NIH has not yet obtained the sample, what are the planned studies and evaluations NIH will conduct with the sample when it is obtained?

15. What is the nature of NIH's concerns about purported restrictions at the WIV including "diminished cell-phone traffic in October 2019, and the evidence that there may have been roadblocks surrounding the facility from October 14-19, 2019[,]" about the WIV lab or virus origin?[30]

a. What is the basis of information to NIH about the purported restrictions at the WIV?

b. What are the other purported restrictions at the WIV in October 2019?

16. After terminating EcoHealth Alliance's 2019 project entitled "Understanding the Risk of Bat Coronavirus Emergence," the NIH later offered to reinstate the EcoHealth Alliance funding in July 2020 if EcoHealth Alliance agreed to meet certain conditions.[31]

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[28] Betsy McKay, *NIH Presses U.S. Nonprofit for Information on Wuhan Virology Lab*, THE WALL STREET JOURNAL (Aug. 19. 2020), *available at* https://www.wsj.com/articles/nih-presses-u-s-nonprofit-for-information-on-wuhan-virology-lab-11597829400.

[29] Meredith Wadman, *NIH imposes 'outrageous' conditions on resuming coronavirus grant targeted by Trump*, SCIENCEMAG (Aug. 19, 2020), *available at* https://www.sciencemag.org/news/2020/08/nih-imposes-outrageous-conditions-resuming-coronavirus-grant-targeted-trump.

[30] *Id.*

[31] Betsy McKay, *NIH Presses U.S. Nonprofit for Information on Wuhan Virology Lab*, THE WALL STREET JOURNAL (Aug. 19. 2020), *available at* https://www.wsj.com/articles/nih-presses-u-s-nonprofit-for-information-on-wuhan-virology-lab-11597829400.

a. Please provide all of the information presented to NIH from EcoHealth Alliance in response to NIH's conditions for reinstatement.

b. What actions did NIH take based upon the information received? How has the information been used in NIH's investigation?

c. One condition for the federal award reinstatement was for EcoHealth Alliance to arrange for an outside inspection of the WIV and its records, "with specific attention to addressing the question of whether WIV staff had SARS-CoV-2their possession prior to December 2019."[32] Why is it pertinent to the NIH's investigation if staff at WIV had SARS-CoV-2 in their possession prior to December 2019? What is the potential significance if the staff did have the virus in their possession prior to December 2019?

d. What information does NIH have that was used for the basis of requesting that the EcoHealth Alliance "must 'explain the apparent disappearance' of a scientist who worked in the Wuhan lab," and on social media was rumored to be "patient zero" of the pandemic?[33]

i. What is the potential significance about the whereabouts of this scientist and the photo being removed from the website?

17. Please provide all correspondence and communications between NIH and Columbia University related to federal funding involving the WIV, including email correspondence in April 2020 between Dr. Michael Lauer, Deputy Director of extramural research, and Naomi Schrag of Columbia University.

a. In an April 2020 email, Dr. Lauer advised Naomi Schrag of Columbia University that it would be helpful for NIH "to know about all China-based participants in this work since the Type 1 grant started in 2014 - who they were and how much money they received."[34] Why did NIH request that Columbia University provide information about all of the China-based participants?

i. What is the pertinence of the timeframe starting in 2014 for the requested information?

ii. Did Columbia University provide the NIH with the requested information about all of the China-based participants from all grantees since 2014? If so, please provide the information1. If not, why not?

Federal Funding Records

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[32] *Id.*
[33] *Id.*
[34] Meredith Wadman and Jon Cohen, *NIH's axing of bat coronavirus grant a 'horrible precedent' and might break rules, critics say*, SCIENCEMAG (Apr. 30, 2020), *available at* https://www.sciencemag.org/news/2020/04/nih-s-axing-bat-coronavirus-grant-horrible-precedent-and-might-break-rules-critics-say.

18. Please provide ledgers or any accounting for dispersion of all NIH federal funding awards that EcoHealth Alliance has sent to the WIV, including through contracts, grants, donations, cooperative agreements, staffing, or any other support or means. In addition, please provide the results and outcomes from the funding and support.[35]

19. What is the total amount of NIH federal funding per year from 2017 through 2021 that has directly or indirectly supported the WIV scientists or research through grant recipients, including to EcoHealth Alliance; Wildlife Trust, Inc.; Columbia University Health Sciences; Trustees of Columbia University; University of North Carolina Chapel Hill; Vanderbilt University; University of Virginia; and Oregon Health and Science University?[36]

20. **According to a report in *The Washington Post* on April 14, 2020, the WIV issued a news release in English about the final visit from U.S. Embassy scientist diplomats in Beijing, which occurred on March 27, 2018.[37] Does the NIH have a copy of this news release? If so, please provide a copy.**

21. **For NIH award recipients that have provided support to the WIV since January 1, 2012, please provide annual reports, trip reports related to the WIV, documentation of any survey or field trips by the WIV, and interim data summaries from the WIV.**

22. Please provide copies of all grantee annual reports, progress reports, projects, studies, and observations since 2014 where foreign sites for all Type 1 and Type 2 awards have been documented as involving the WIV.

23. Please provide copies of all grantee annual reports, progress reports, projects, studies, and observations since 2014 for NIH domestic grantee awards with a foreign component involving the WIV.

24. Please provide the name(s) of the NIH program manager(s) or officer(s) responsible for overseeing the grants to EcoHealth Alliance and time period(s) of responsibility.

25. Please provide the name(s) of the NIH Scientific Review Officers responsible for reviewing and approving any NIH financial awards to EcoHealth Alliance and any other funding recipients that supported the WIV.

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[35] Betsy McKay, *NIH Presses U.S. Nonprofit for Information on Wuhan Virology Lab*, THE WALL STREET JOURNAL (Aug. 19. 2020), *available at* https://www.wsj.com/articles/nih-presses-u-s-nonprofit-for-information-on-wuhan-virology-lab-11597829400.

[36] National Institutes of Health, Research Portfolio online Reporting Tools, NIH RePorter *available at* https://report.nih.gov/ (last accessed March 6, 2020).

[37] Josh Rogin, *Opinion: State Department cables warned of safety issues at Wuhan lab studying bat coronaviruses*, THE WASHINGTON POST (Apr. 14, 2020), *available at* https://www.washingtonpost.com/opinions/2020/04/14/state-department-cables-warned-safety-issues-wuhan-lab-studying-bat-coronaviruses/.

26. According to an editorial in *The Wall Street Journal*, the WIV housed tens of thousands of bat samples and laboratory animals in 2019.[38] Please provide any information the NIH has on the number of bat samples and animals at the WIV.

    a. Did any NIH scientists who are fluent in Mandarin review the Chinese scientific literature on the WIV research related to coronaviruses that is dated before February 1, 2020?

27. Does the NIH have the unpublished sequences of bat coronaviruses that were maintained in the WIV database before December 30, 2019, or before the database was removed from the internet?[39] Does NIH have the full sequences of the eight viruses sampled in the Yunnan province on an EcoHealth Alliance bat-virus sampling trip in 2015?

    a. Please provide NIH's analysis if the sequences have been analyzed.

    b. If NIH does not have the sequences, can NIH get this information from the EcoHealth Alliance or from other NIH-funded sources?

28. Please provide the original version of "Origin and cross-species transmission of bat coronaviruses in China" that was submitted to *Nature* by EcoHealth Alliance on October 6, 2019, published August 25, 2020, and funded in part by NIAID (award number R01AI110964).[40] If NIH does not have the October 6, 2019 report, can NIH obtain it from EcoHealth Alliance for this response? If so, please provide the report.

29. Have NIH, EcoHealth Alliance, or other NIH award recipient(s) been denied permission or access to results of any WIV research, which indirectly received financial support from NIH awards? If so, please provide the date(s), individuals involved, and circumstances of each denial.

We request that the NIH provide the requested documents and information in a coordinated response from all stakeholders and the appropriate divisions within NIH, including but not limited to subject matter experts from NIH's Division of Security and Emergency Response, the Office of Management Assessment, the Center for Scientific Review, the National Institute of Allergy and Infectious Diseases, and the Office of Extramural Research. After the requested information has been provided, we ask that the NIH provide a briefing to the Minority Committee staff to discuss the information that the NIH has related to the origins of SARS-CoV-2, including any potential links to the WIV. Finally, we request that you appoint an NIH working group representing an appropriate diversity of scientific disciplines to collect data and

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[38] Mike Pompeo and Miles Yu, *NIH Presses U.S. Nonprofit for Information on Wuhan Virology Lab*, THE WALL STREET JOURNAL (Feb. 23, 2021), *available at* https://www.wsj.com/articles/chinas-reckless-labs-put-the-world-at-risk-11614102828.

[39] Washington Post Editorial Board, *We're still missing the origin story of this pandemic. China is sitting on the answers*, THE WASHINGTON POST (Feb. 5, 2021), *available at* https://www.washingtonpost.com/opinions/2021/02/05/coronavirus-origins-mystery-china/?arc404=true.

[40] Latinne, A., Hu, B., Olival, K.J. et al,. *Origin and cross-species transmission of bat coronaviruses in China*, Nature (Aug. 25, 2020), *available at* https://www.nature.com/articles/s41467-020-17687-3#Ack1.

information related to COVID-19 origins (including the WIV), and that the NIH working group coordinate and consult with foreign scientific agencies involved in similar work.

Your assistance with this request is greatly appreciated. If you have any questions, please contact Alan Slobodin or Diane Cutler of the Minority Committee staff.

Sincerely,

Cathy McMorris Rodgers
Republican Leader
Committee on Energy and Commerce

Brett Guthrie
Republican Leader
Subcommittee on Health

H. Morgan Griffith
Republican Leader
Subcommittee on Oversight and Investigations

Attachment

Cc: The Honorable Frank Pallone, Chairman
The Honorable Diana DeGette, Chair, Subcommittee on Oversight and Investigations
The Honorable Anna Eshoo, Chair, Subcommittee on Health

2018 Cables from Embassy Beijing and Consulate General Wuhan to State Department Headquarters in Washington, D.C.

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MRN:	18 BEIJING 138
Date/DTG:	Jan 19, 2018 / 190739Z JAN 18
From:	AMEMBASSY BEIJING
Action:	WASHDC, SECSTATE *ROUTINE*
E.O.:	13526
TAGS:	SHLH, ETRD, ECON, PGOV, CN
Captions:	SENSITIVE
Reference:	17 WUHAN 48
Subject:	China Opens First Bio Safety Level 4 Laboratory

1. (SBU) **Summary and Comment:** The Chinese Academy of Sciences (CAS) has recently established what is reportedly China's first Biosafety Level 4 (BSL-4) laboratory in Wuhan. This state-of-the-art facility is designed for prevention and control research on diseases that require the highest level of biosafety and biosecurity containment. Ultimately, scientists hope the lab will contribute to the development of new antiviral drugs and vaccines, but its current productivity is limited by a shortage of the highly trained technicians and investigators required to safely operate a BSL-4 laboratory and a lack of clarity in related Chinese government policies and guidelines. (b)(5)

(b)(5)

(b)(5) **End Summary and Comment.**

China Investing in Infectious Disease Control

2. (U) Between November 2002 and July 2003, China faced an outbreak of Severe Acute Respiratory Syndrome (SARS), which, according to the World Health Organization, resulting in 8,098 cases and leading to 774 deaths reported in 37 countries. A majority of cases occurred in China, where the fatality rate was 9.6%. This incident convinced China to prioritize international cooperation for infectious disease control. An aspect of this prioritization was China's work with the Jean Merieux BSL-4 Laboratory in Lyon, France, to build China's first high containment laboratory at Wuhan's Institute of Virology (WIV), an institute under the auspices of the Chinese Academy of Sciences (CAS). Construction took 11 years and $44 million USD, and construction on the facility was completed on January 31, 2015. Following

two years of effort, which is not unusual for such facilities, the WIV lab was accredited in February 2017 by the China National Accreditation Service for Conformity Assessment. It occupies four floors and consists of over 32,000 square feet. WIV leadership now considers the lab operational and ready for research on class-four pathogens (P4), among which are the most virulent viruses that pose a high risk of aerosolized person-to-person transmission.

Unclear Guidelines on Virus Access and a Lack of Trained Talent Impede Research

3. (SBU) In addition to accreditation, the lab must also receive permission from the National Health and Family Planning Commission (NHFPC) to initiate research on specific highly contagious pathogens. According to some WIV scientists, it is unclear how NHFPC determines what viruses can or cannot be studied in the new laboratory. To date, WIV has obtained permission for research on three viruses: Ebola virus, Nipah virus, and Xinjiang hemorrhagic fever virus (a strain of Crimean Congo hemorrhagic fever found in China's Xinjiang Province). Despite this permission, however, the Chinese government has not allowed the WIV to import Ebola viruses for study in the BSL-4 lab. Therefore, WIV scientists are frustrated and have pointed out that they won't be able to conduct research project with Ebola viruses at the new BSL-4 lab despite of the permission.

(b)(6)

(b)(6) Thus, while the BSL-4 lab is ostensibly fully accredited, its utilization is limited by lack of access to specific organisms and by opaque government review and approval processes. As long as this situation continues, Beijing's commitment to prioritizing infectious disease control - on the regional and international level, especially in relation to highly pathogenic viruses, remains in doubt.

(b)(6) noted that the new lab has a serious shortage of appropriately trained technicians and investigators needed to safely operate this high-containment laboratory. University of Texas Medical Branch in Galveston (UTMB), which has one of several well-established BSL-4 labs in the United States (supported by the National Institute of Allergy and Infectious Diseases (NIAID of NIH)), has scientific collaborations with WIV, which may help alleviate this talent gap over time. Reportedly, researchers from GTMB are helping train technicians who work in the WIV BSL-4 lab. Despite this, (b)(6) they would welcome more help from U.S. and international organizations as they establish "gold standard" operating procedures and training courses for the first time in China. As China is building more BSL-4 labs, including one in Harbin Veterinary Research Institute subordinated to the Chinese Academy of Agricultural Sciences (CAAS) for veterinary research use, (b)(6) the training for technicians and investigators working on dangerous pathogens will certainly be in demand.

Despite Limitations, WIV Researchers Produce SARS Discoveries

6. (SBU) The ability of WIV scientists to undertake productive research despite limitations on the use of the new BSL-4 facility is demonstrated by a recent publication on the origins of SARS. Over a five-year study, (b)(6) (and their research team) widely sampled bats in Yunnan province with funding support from NIAID/NIH, USAID, and several Chinese funding agencies. The study results were published in PLoS Pathogens online on Nov. 30, 2017 (1), and it demonstrated that a SARS-like coronaviruses isolated from horseshoe bats in a single cave contain all the building blocks of the pandemic SARS-coronavirus genome that caused the human outbreak. These results strongly suggest that the highly pathogenic SARS-coronavirus originated in this bat population. Most importantly, the researchers also showed that various SARS-like coronaviruses can interact with ACE2, the human receptor identified for SARS-coronavirus. This finding strongly suggests that SARS-like coronaviruses from bats can be transmitted to humans to cause SARS-like disease. From a public health perspective, this makes the continued surveillance of SARS-like coronaviruses in bats and study of the animal-human interface critical to future emerging coronavirus outbreak prediction and prevention. (b)(5) (b)(5) WIV scientists are allowed to study the SARS-like coronaviruses isolated from bats while they are precluded from studying human-disease causing SARS coronavirus in their new BSL-4 lab until permission for such work is granted by the NHFCP.

1. Hu B, Zeng L-P, Yang X-L, Ge X-Y, Zhang W, Li B, et al. (2017) Discovery of a rich gene pool of bat SARS-related coronaviruses provides new insights into the origin of SARS coronavirus. PLoS Pathog 13(11): e1006698. https://doi.org/10.1371/journal.ppat.1006698

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MRN:	18 WUHAN 38
Date/DTG:	Apr 19, 2018 / 190551Z APR 18
From:	AMCONSUL WUHAN
Action:	WASHDC, SECSTATE *ROUTINE*
E.O.:	13526
TAGS:	SHLH, PGOV, CN, PREL, TBIO, KGHI, CDC, EAID, KHIV, IN, JP, TW, TSPL, PINS, SENV
Captions:	SENSITIVE
Reference:	A) 18 BEIJING 138 B) 17 BEIJING 2458 C) 11 MUMBAI 630 D) 17 TOKYO 716 E) 13 SEOUL 790
Subject:	China Virus Institute Welcomes More U.S. Cooperation on Global Health Security

1. (SBU) **Summary with Comment:** China's Wuhan Institute of Virology, a global leader in virus research, is a key partner for the United States in protecting global health security. Its role as operator of the just-launched Biosafety Level 4 (or "P4") lab -- the first such lab in China -- opens up even more opportunities for expert exchange, especially in light of the lab's shortage of trained staff (Ref A). (b)(5)

(b)(5)

(b)(5) **End Summary with Comment.**

2. (U) Wuhan Institute of Virology researchers and staff gave an overview of the lab and current cooperation with the United States to visiting Environment, Science, Technology and Health Counsellor Rick Switzer and Consulate Wuhan Consul General Jamie Fouss in late March. In the last year, the institute has also hosted visits from the National Institutes of Health (NIH), National Science Foundation, and experts from the University of Texas Medical Branch in Galveston. The institute reports to the Chinese Academy of Sciences in Beijing.

P4 Lab is Open and Transparent, Officials Emphasize

3. (SBU) The Wuhan P4 lab, referring to labs with the highest level of safety precautions, became fully operational and began working with live viruses early this year. Institute officials said they believed it is the only operational P4 lab in Asia aside from a U.S. Centers for Disease

Control (CDC)-supported facility in Pune, India (Ref C). China plans to stand up a second P4 lab in Harbin. Institute officials said Japan's biosafety labs are "old" and lack cutting-edge equipment, so they consider Japan's labs to be "P3 Plus" (*Note*: the Japanese government says it has one P4-level lab in the Tokyo suburbs, though its activities are limited, and Japan is building a new P4 lab in Nagasaki, see Ref D. Taiwan operates at least one P4 lab. South Korea was close to opening a P4 lab as of last year, see Ref E. *End.Note.*) Wuhan's lab is located about 20 miles from the city center in Zhengdian district, and the institute plans to gradually consolidate its other training, classroom and lab facilities at that location.

4. (U) Officials described the lab as a "regional node" in the global biosafety system and said it would play an emergency response role in an epidemic or pandemic. The lab's English brochure highlighted a national security role, saying that it "is an effective measure to improve China's availability in safeguarding national bio-safety if [a] possible biological warfare or terrorist attack happens."

5. (SBU) Institute officials said there would be "limited availability" for international and domestic scientists who had gone through the necessary approval process to do research at the lab. They stressed that the lab aimed to be a "worldwide, open platform" for virology. They said they welcomed U.S. Centers for Disease Control (CDC) experts, noting that the Chinese Academy of Sciences was not strong on human disease expertise, having only focused on it in the last 15 years, after the SARS outbreak. A Wuhan-based French consulate official who works on science and technology cooperation with China also emphasized that the lab, which was initiated in 2004 as a France-China joint project, was meant to be "open and transparent" to the global scientific community. "The intent was to set up a lab to international standards, and open to international research," he said. French experts have provided guidance and biosafety training to the lab, which will continue, the French official said. Institute officials said that France provided the lab's design and much of its technology, but that it is entirely China-funded and has been completely China-run since a "handover" ceremony in 2016.

6. (U) In addition to French assistance, experts from the NIH-supported P4 lab at the University of Texas Medical Branch in Galveston have trained Wuhan lab technicians in lab management and maintenance, institute officials said. The Wuhan institute plans to invite scientists from the Galveston lab to do research in Wuhan's lab. One Wuhan Institute of Virology researcher trained for two years at the Galveston lab, and the institute also sent one scientist to U.S. CDC headquarters in Atlanta for six months' work on influenza.

NIH-Supported Research Revises SARS Origin Story

7. (U) NIH was a major funder, along with the Natural Science Foundation of China (NSFC), of SARS research by the Wuhan Institute of Virology's [redacted]. This lends weight to the theory that SARS originated in bat populations before jumping first to civet cats (likely via bat feces) and then to humans, [redacted]

(b)(6)
(b)(5) team has provided support in statistical modeling to assess the risk of more coronaviruses like SARS crossing over to human populations.

Ready to Help with the Global Virome Project

8. (U) Institute officials expressed strong interest in the Global Virome Project (GVP), and said Chinese funding for the project would likely come from Chinese Academy of Sciences funding already earmarked for One Belt, One Road-related initiatives. The GVP aims to launch this year as an international collaborative effort to identify within ten years virtually all of the planet's viruses that have pandemic or epidemic potential and the ability to jump to humans. "We hope China will be one of the leading countries to initiate the Global Virome Project," one Wuhan Institute of Virology official said. China attended a GVP unveiling meeting in January in Thailand and is waiting for more details on the initiative. The officials said that the Chinese government funds projects similar to GVP to investigate the background of viruses and bacteria. This essentially constituted China's own Virome Project, officials said, but they noted the program currently has no official name.

9. (SBU) The Wuhan Institute of Virology's (b)(6) is the (b)(6) (b)(6) (b)(6) which is designed to show "proof of concept" and be a forerunner to the Global Virome Project. (b)(6) with the EcoHealth Alliance (a New York City-based NGO that is working with the University of California, Davis to manage the (b)(6) recently planned to visit Wuhan to meet with (b)(6) (b)(6) noted that China has expressed interest in building the GVP database, which would put China in a leadership position. Other countries have confidence in China's ability to build such a database, but are skeptical on whether China could remain transparent as a "gatekeeper" for this information (b)(6) said. (b)(6) expressed frustration with the slow progress so far in launching GVP, noting that the effort lacked funding sources, needed to hire a CEO, and would have to boost its profile at G7, G20 and other high-level international meetings.

U.S.-China Workshop Explores Research Partnerships

10. (U) The Institute also has ongoing collaboration with the U.S. National Science Foundation, including a just-concluded workshop in Shenzhen, involving about 40 scientists from the United States and China, on the topic of the "Ecology and Evolution of Infectious Diseases." Co-sponsored by the Natural Science Foundation of China (NSFC), (b)(6)
(b)(6)
(b)(6) The workshop explored opportunities for U.S.-China research cooperation in areas like using "big data" to predict emerging infectious diseases, climate change's effect on vector-borne diseases, and pathogen transmission between wildlife, domestic animals and humans.

11. (SBU) Some workshop participants also expressed skepticism about the Global Virome Project's (GVP) approach, saying that gaining a predictive understanding of viruses with pandemic potential would require going beyond the GVP's strategy of sample collection, to take an "ecological" approach that considers the virome beyond vertebrate systems to identify

mechanisms driving pathogen evolution. A follow-on workshop will be held in June at the University of Berkeley. NSF and NSFC hope to jointly announce a funding call for collaborative projects later this year.

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EXHIBIT 25

EXHIBIT 25

FRANK PALLONE, JR., NEW JERSEY
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ONE HUNDRED SEVENTEENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515–6115
Majority (202) 225–2927
Minority (202) 225–3641

June 10, 2021

The Honorable Francis Collins, M.D., Ph.D.
Director
National Institutes of Health
9000 Rockville Pike
Bethesda, MD 20892

Dear Dr. Collins:

As the committee of jurisdiction over public health, the Energy and Commerce Committee has authorizing responsibilities over the U.S. National Institutes of Health (NIH). We strongly support a comprehensive investigation into the origins of the COVID-19 pandemic, including the possibility of an accidental laboratory leak.

The Chinese Communist government has not yet allowed Chinese scientists to cooperate with an investigation into COVID-19 origins, and has admitted to destroying samples and records pertinent to such an investigation.[1] Thus, it is imperative we assemble all data and information in U.S. possession about bat coronavirus research experiments and lab safety protocols from all sources outside of China, particularly from EcoHealth Alliance (EHA). EHA is an NIH grantee who has been involved in bat coronavirus research in China and has issued grant subawards to the Wuhan Institute of Virology (WIV). It is also essential to collect information about the WIV, the laboratory that was conducting bat coronavirus experiments located in Wuhan, China, the epicenter of the COVID-19 outbreak. As a federal cognizant grant-making agency that funded bat coronavirus research at the WIV through EHA awards, NIH is in a unique position to publicly share detailed research reports in its possession. Importantly, NIH has full access to EHA records and EHA has refused to cooperate with our inquiry. Therefore, it is critical for NIH to cooperate with our objective fact-finding investigation as we continue to collect data about U.S. funded bat coronavirus research.

[1] Josh Chin, *China Told Labs to Destroy Coronavirus Samples to Reduce Safety Risks*, The Wall Street Journal (May 16, 2020) *available at* https://www.wsj.com/articles/china-told-labs-to-destroy-coronavirus-samples-to-reduce-biosafety-risks-11589684291/.

Since the Republican committee leaders March 18, 2021 letter to NIH, our investigation has found a number of additional issues that raise very serious concerns about the adequacy of NIH's oversight of grantees. The following newly found issues appear troubling and given the significance of these concerns, we expect the NIH to respond fully and substantively. Minority committee staff is continuing to work with your staff to schedule an NIH briefing. The NIH should be prepared to address these issues at the briefing, in addition to all of the questions from the March 18, 2021 letter that presently remain unanswered.

1. NIH's Award of $2 million to EHA Despite Grant Suspension

On May 25, 2021, a spokesperson for EHA told Fox Business that its NIH funding is frozen and NIH did not give them guidance on when funds will be unfrozen.[2] EHA's representation about their NIH funding was not forthcoming. NIH terminated grant R01AI110964 to EHA entitled, "Understanding the Risk of Bat Coronavirus Emergence" in April 2020.[3] NIH eventually converted the grant termination to a suspension on July 8, 2020, pending EHA's responses to seven requests from NIH related to WIV's actions. NIH could unfreeze the funding if EHA cooperates with NIH's requests, but apparently EHA has not yet done so. Despite EHA's obstruction of NIH requests, NIH gave new financial awards to EHA in June 2020 and August 2020, totaling $2,127,602.[4] By NIH authorizing new funding to EHA, an NIH-suspended grantee, the NIH undercut its July 8, 2020 suspension and has incentivized its grantees to defy NIH oversight with impunity.

2. NIH's Inadequate Oversight of EHA's Other Support

You testified during a May 25, 2021 Congressional hearing that NIH was, "...of course not aware of other sources of funds or other activities they might have undertaken outside of what our approved grant allowed," when asked about NIH grant recipient EHA, and the WIV, an EHA subaward recipient.[5] Pursuant to the NIH Grants Policy, EHA was required to report all "other support," in-kind contributions such as laboratory space, equipment and supplies, and facilities and other resources for all individuals designated as the Principal Investigator (PI) personnel.[6] Per the NIH grants policy, the grant Principal Investigator Dr. Peter Daszak and EHA were required to report its other research funding sources and activities to NIH.[7] Without

[2] Fox News, *Biden State Department quietly ended team's work probing COVID origin*, State Department (May 25, 2021) *available at* https://www.foxnews.com/politics/biden-state-department-shut-down-team-covid-origin-investigation.
[3] National Institutes of Health, *Understanding the Risk of Bat Coronavirus Emergence*, REPORTER (last accessed June 2, 2021) *available at* https://reporter.nih.gov/search/p1odLH_U1kyZgyOhClrN2w/project-details/9320765#similar-Projects/.
[4] USASpending.gov, *Cooperative agreement numbers U01AI151797 and U01AI153420*, EcoHealth Alliance available at
[5] House Committee on Appropriations, *FY 2022 Budget Request for the National Institutes of Health*, Hearings (May 25, 2021) *available at* https://appropriations.house.gov/events/hearings/fy-2022-budget-request-for-the-national-institutes-of-health.
[6] National Institutes of Health, Other Support, Grants & Funding (last accessed June 1, 2021) available at https://grants.nih.gov/grants/forms/othersupport.htm.
[7] *Id.*

further details or documentation, your testimony bolsters the notion that NIH oversight is largely ignorant of other awards to the grantee.

3. NIH's Inadequate Oversight of EHA's Delinquent Financial Reports

As the prime recipient of NIH grant R01AI110964, EHA gave a total $598,500 in five subaward transactions to the WIV from 2015 to 2019 for the WIV to, "conduct high-quality testing, sequencing, and analyses of field samples; maintenance of cold-chains from field to lab; ensuring quality control of sample storage and testing; collaborating on scientific publications and programmatic reporting."[8] EHA also gave a total of $201,217.10 in two subaward transactions to the Wuhan University School of Public Health (WUSPH) to "conduct targeted site-analyses, human behavioral surveillance including qualitative and quantitative surveys; analyses of data; collaborating on scientific publications and programmatic reporting," from 2016 through 2017.[9]

EHA is required to report its subawards to GSA's FFATA Subaward Reporting System (FSRS) by the end of the month following the month when the subaward was made.[10] For example, when EHA issued a $133,000 subaward to the WIV on May 29, 2015, EHA was required to report that subaward to FSRS by June 30, 2015.[11] USASpending is the U.S. government's open federal spending data source and when the grant number R01AI110964 data is downloaded, details reveal that EHA did not report subawards for that grant until 2020, even though EHA made subawards starting in 2015.[12] EHA reported all seven subaward transactions for R01AI110964 on July 13, 2020, five days following NIH's July 8, 2020 letter to EHA instructing EHA to ensure EHA reported all subaward data to FSRS.[13] Before the year 2020, only one other EHA subaward grant is reported in USASpending.gov, in which three subaward transactions for NIH grant number R56TW009502 are recorded in 2014.[14] EHA's apparent non-compliance of required financial reporting raises concerns about the adequacy of NIH oversight of NIH grants.

4. NIH's Possible Funding of EHA for Duplicative Research in China

EHA received federal funding as both a prime and sub-recipient not only from NIH, but also from the U.S. Agency for International Development (USAID) for its bat coronavirus research. The project descriptions and research articles are so similar that a distinction between the NIH bat coronavirus research objectives and achievements for the awards to EHA are almost interchangeable with EHA's USAID-funded bat coronavirus research objectives and

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[8] *Id.*
[9] *Id.*
[10] USAspending.gov, *Data Sources,* About (last accessed June 1, 2021), *available at* https://www.usaspending.gov/about.
[11] *Id.*
[12] USASpending.gov, *Advanced Search: Recipient – EcoHealth Alliance* (June 1, 2021) *available at* USASpending.gov/.
[13] *Id.*
[14] *Id.* See NIH grant number R56TW009502.

achievements.[15] The NIH grant progress reports will reveal details about the bat coronavirus research that can be compared to the reports from USAID-funded research. In its research funded by the USAID, EHA partnered with the WIV and with East China Normal University.[16] We are very concerned that the NIH and USAID may have funded duplicate projects and that EHA partnered with additional unreported entities in China for NIH-funded research.

5. NIH's Inadequate Reconciliation of EHA's Grant Subawards

As far back as 2005, Peter Daszak of EHA has authored over 20 bat coronavirus and other zoonic pathogen research articles with Dr. Zhengli Shi of the WIV, plus other researchers, about experiments funded by NIH.[17] Their collaborative research has resulted in a 2005 publication entitled "Bats Are Natural Reservoirs of SARS-Like Coronaviruses," funded by NIH.[18] In 2013, they published "Isolation and characterization of a bat SARS-like coronavirus that uses the ACE2 receptor," funded by NIH and USAID. [19] Their numerous publications acknowledge NIH as a research sponsor yet the only EHA support to the WIV in USASpending.gov was reported by EHA on July 13, 2020 (see concern number three above).[20] Vanity Fair reported that Dr. Shi "herself listed U.S. government grant support of more than $1.2 million on her curriculum vitae: $665,000 from the NIH between 2014 and 2019; and $559,500 over the same period from USAID."[21] EHA's late and potentially incomplete reporting of the WIV as its sub-award recipient raises questions about EHA's compliance with required financial reporting and also raises concerns about NIH's oversight of grant awards to EHA.

6. NIH's Inadequate Oversight of EHA's Place of Performance Reporting

The Federal Funding Accountability and Transparency Act of 2006 (FFATA) requires that federal award reporting must include the primary location of where the work will be performed, (including the city, state, congressional district, and country).[22] For EHA's NIH awards, China is not listed as the place of performance in USASpending.gov and instead, EHA's

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[15] USASpending.gov, *Advanced Search: Recipient – EcoHealth Alliance* (June 1, 2021) *available at* USASpending.gov/.
[16] USAID PREDICT-1 CONSORTIUM, *Reducing Pandemic Risk, Promoting Global Health*, Final Report (Dec. 2014) *available at* https://ohi.sf.ucdavis.edu/sites/g/files/dgvnsk5251/files/files/page/predict-final-report-lo.pdf.
[17] NIH Reporter, *Anthropogenic change & emerging zoonic paramyxoviruses*, Project Number 5R01TW005869-04 (Budget Start Date June 1, 2005) *available at* https://reporter.nih.gov/search/WMYBIQPE20aG4fAZLFj0lw/project-details/6923645#details, NIH National Library of Medicine, *Advanced Search for 'Shi, Daszak,'* National Center for Biotechnology Information (June 2, 2021) *available at* https://pubmed.ncbi.nlm.nih.gov/?term=Daszak%2C+Shi&sort=date&sort_order=asc&size=200.
[18] NIH National Library of Medicine, *Bats Are Natural Reservoirs of SARS-Like Coronaviruses*, PubMed (Sept.5, 2005) *available at* https://pubmed.ncbi.nlm.nih.gov/16195424/.
[19] Ge, XY., *et al., Isolation and characterization of a bat SARS-like coronavirus that uses the ACE2 receptor*, Nature 503, 535–538 (May 16, 2013) *available at* https://doi.org/10.1038/nature12711.
[20] *Id.*
[21] Katherine Eban, The Lab-Leak Theory – Inside the Fight to Uncover COVID-19 Origins, Vanity Fair (June 3, 2021) *available at* https://www.vanityfair.com/news/2021/06/the-lab-leak-theory-inside-the-fight-to-uncover-covid-19s-origins.
[22] PL 109-282, Sept. 26, 2006 *available at* https://www.govinfo.gov/content/pkg/PLAW-109publ282/pdf/PLAW-109publ282.pdf.

primary place of performance is identified as New York.[23] The NIH grant documents, and the financial and progress reports we have requested will contain travel budgets and research details that will confirm the location(s) where EHA actually performed its research. Published research articles about NIH-funded experiments describe EHA's bat coronavirus research and surveillance activities often partnered with the WIV in China. We are very concerned about the discrepancy in EHA's primary place of performance as being New York in USASpending.gov when research articles, publications, and media interviews suggest EHA's primary place of performance is not domestic.[24]

7. NIH's Lack of Visibility into EHA's Grant Subawards

USASpending.gov limits visible data to prime and subaward recipients, and does not disclose funds that are further disbursed subaward recipients.[25] EHA is a subaward recipient of NIH grant funds from the Arizona State University and the Trustees of Columbia University in New York City.[26] As a subaward recipient, EHA does not publicly report when it further distributes subaward funds to other organizations such as the WIV or other recipients in China.[27] NIH questions to EHA in the July 8, 2020 grant suspension letter suggest that NIH lacks information and visibility on sub-grant awards that are either issued or received by EHA.[28]

8. NIH's Inadequate Oversight of EHA's Grant Fund Accounting

In our April 18, 2021 letter to EHA, we raised the issue that EHA reported a $319,570 cash award grant and a $126,792 cash award grant disbursed by wire to China for the purpose of "[u]understanding the risk of bat coronavirus emergence" on its IRS Form 990, calendar year 2016.[29] EHA reported giving $321,700 for coronavirus and emerging diseases to China on its IRS Form 990, calendar year 2015.[30] EHA IRS Form 990's for other years do not include that purpose or identify the WIV as an organization to which funds were paid. With EHA organized as a 501 (c)(3) non-profit organization, its IRS Form 990's are public documents able to be reviewed by NIH. As a non-federal entity that expends more $750,000 or more in federal funds in one year, EHA is required to submit a Single Audit report, previously known as the OMB Circular A-133 audit. The purpose of a Single Audit report is to provide assurance to the Federal Government that a non-federal entity has adequate internal controls in place, and is generally in

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[23] *Id.*
[24] Nidhi Subbaraman, *'Heinous!': Coronavirus researcher shut down for Wuhan-lab link slams new funding restrictions*, Nature (Aug. 21, 2020), *available at* https://www.nature.com/articles/d41586-020-02473-4.
[25] USASpending.gov, *Advanced Search: Recipient - EcoHealth Alliance* (June 1, 2021) *available at* USASpending.gov/.
[26] *Id.*
[27] *Id.*
[28] Internal Revenue Service, EHA 990 final, Schedule F, Parts I and II (May 3, 2017) *available at* https://apps.irs.gov/pub/epostcard/cor/311726494_201606_990_2017090514700974.pdf.
[29] U.S. Energy and Commerce Republicans, *Letter to EcoHealth Alliance*, The COVID-19 Origins Investigation (Apr. 16, 2021) *available at* https://republicans-energycommerce.house.gov/the-covid-19-origins-investigation/.
[30] Internal Revenue Service, *EHA 990 final 2015, Schedule F, Parts I and II* (May 3, 2017) *available at* https://apps.irs.gov/pub/epostcard/cor/311726494_201606_990_2017090514700974.pdf.

compliance with program requirements.[31] In EHA's Single Audit reports for years 2016 to 2020, no payments are evident for EHA funds paid to the WIV.[32]

9. NIH's Inadequate Oversight of Its Funded Researchers in China

The WIV named NIH and EHA on its website as WIV international partner as of and prior to the date of our March 18, 2021 letter to NIH.[33] By March 22, 2021, the WIV had removed NIH as a partner from its website.[34] The NIH has characterized its relationship Chinese scientists as respectable scientific partners.[35] However, within three days following our letter to NIH which inquired about NIH grants to the WIV, the WIV quickly concealed its long-standing relationship with NIH by deleting evidence of its NIH partnership from its website. This action does not seem consistent with NIH's claim that the WIV and its scientists were a respectable scientific partner. It has been reported that some Chinese scientists working with EHA are current or former members of the People's Liberation Army of China.[36] It has also been reported that the Chinese military were conducting research at the WIV.[37] We are concerned that NIH-funded coronavirus research in China may not have undergone proper biodefense risk analysis.

10. NIH's Lack of Cooperation with Congressional Oversight Inquiry

NIH is supposed to be a transparent institution and the grant documents we requested should be a matter of public record.[38] Contrary to your public statement implying that we asked for "pretty sensitive materials, not quite classified, but getting close to that," the grant documents we requested are releasable to the public per NIH's own policy and should have already been provided to us.[39]

As you are aware, the NIH grant documents and progress reports we requested will include details pertinent to our COVID-19 origins investigation, including information about: all research participants and collaborating organizations; location(s) of work performed; instruments, equipment and monies provided to grant sub-recipients; financial accounting

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[31] U.S. Department of Health and Human Services, *Single Audit* (Apr. 25, 2016) *available at* (https://www.hhs.gov/about/agencies/asfr/data-act-program-management-office/single-audit/index.html.

[32] Federal Audit Clearinghouse, *EcoHealth Alliance, Inc and Wildlife Preservation Trust Int. Single Audit Reports 2017-2021* (June7, 2021) *available at* https://facdissem.census.gov/SearchResults.aspx.

[33] Internet Archive Wayback Machine, *Wuhan Institute of Virology, CAS*, Partnerships (Mar. 18, 2021) *available at* https://web.archive.org/web/20210318052528/http://english.whiov.cas.cn/International_Cooperation2016/Partnerships/.

[34] Internet Archive Wayback Machine, *Wuhan Institute of Virology, CAS*, Partnerships (Mar. 22, 2021) *available at* https://web.archive.org/web/20210322053537/http://english.whiov.cas.cn/International_Cooperation2016/Partnerships/

[35] House Committee on Appropriations, *FY 2022 Budget Request for the National Institutes of Health*, Hearings (May 25, 2021) *available at* https://appropriations.house.gov/events/hearings/fy-2022-budget-request-for-the-national-institutes-of-health.

[36] Alexis, Shi Zhengli: Weaponizing Coronaviruses, with Pentagon Funding, at a Chinese Military Lab, https://enviroshop.com/shi-zhengli-weaponizing-coronaviruses-with-pentagon-funding-at-a-chinese-military-lab/

[37] *Id.*

[38] National Institutes of Health, *NIH Grants Policy Statement*, Policy and Compliance (June 1, 2021) *available at* https://grants.nih.gov/policy/nihgps/index.htm.

[39] *Id.*

reports; research techniques and accomplishments; research products such as: technologies, patent applications, data or databases, physical collections, and models; significant changes in use or care of human subjects, vertebrate animals, biohazards, and/or select agents; and budgetary information and project outcomes.[40]

As the federal grant awarding agency, NIH must have the right of access to any of EHA's documents or other records which are pertinent to NIH federal awards.[41] The NIH grants policy states that the Freedom of Information Act (FOIA) and U.S. Department of Health and Human Services regulations require NIH to release certain grant documents and records requested by members of the public, regardless of the intended use of the information.[42] Per NIH policy, NIH will generally release funded applications and progress reports pursuant to a FOIA request.[43] NIH considers most grant-related information in the application or post-award phases as being public information (emphasis added).[44]

In support of this inquiry and the public interest in the origins of the COVID-19 pandemic, please provide written responses to the following by June 24, 2021:

1. We again renew our request for NIH's immediate compliance with our oversight inquiry for production of the grant documents and progress reports forthwith that we first requested on March 18, 2021.

2. What is NIH's policy for awarding funds to organizations when the organization has NIH grant funds in suspended status and are not cooperating NIH requests? If the NIH permits new award funding under these circumstances, please provide the policy, and explain how such funding does not undercut NIH's ability to oversee grantees and does not incentivize grantees to defy NIH's requests for information.

3. Please explain all oversight steps NIH has taken to ensure EHA's full compliance with federal financial subaward reporting requirements for all NIH grants. Please explain if EHA reported to NIH any subaward recipients other than the WIV or the WUSPH for NIH grant R01AI110964. Please provide all financial records of all NIH funds given to Dr. Zhengli Shi of the WIV.

4. For all NIH awards in which EHA was a subrecipient, please provide a financial accounting of EHA's subawards to the WIV or other organizations in China.

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[40] Hugh Hewitt, *Dr. Francis Collis On The U.S. Funding of the Wuhan Lab and Congressional Oversight,* The Hugh Hewitt Show (June 2, 2021) *available at* https://hughhewitt.com/dr-francis-collins-on-the-u-s-funding-of-the-wuhan-lab-and-congressional-oversight/, National Institutes of Health, *Research Performance Progress Report,* Grants & Funding (May 4, 2021) *available at* https://grants.nih.gov/grants/rppr/index.htm.
[41] *Id.*
[42] National Institutes of Health, *NIH Grants Policy Statement,* Policy and Compliance (June 1, 2021) *available at* https://grants.nih.gov/policy/nihgps/index.htm.
[43] *Id.*
[44] *Id.*

5. How does NIH ensure it does not award unapproved duplicate grants for same or similar research already funded by other agencies, to EHA or other NIH grant recipients? For all NIH awards to EHA, please provide accounting information for EHA subawards to recipients in China.

6. Please explain how NIH has reviewed EHA annual Single Audit reports to ensure how EHA has met program and reporting requirements.

7. How does NIH audit the financial reports submitted to the IRS by its 501(c)(3) non-profit organization grant award recipients to ensure NIH awards are accurately reported? How does NIH ensure its grantees do not act as a pass-through or money laundering provider to send U.S. research funding to China?

8. Please explain NIH's policy for ensuring its awardees accurately report the actual place of research performance. For all NIH-funded research, please provide all China site locations where EHA's work was performed.

9. Please explain if EHA reported its other funding or in-kind support, including awards from federal agency, to NIH. Please explain if EHA reported any support from organizations in China.

10. Did NIH perform a biodefense risk analysis for coronavirus research conducted at the WIV as research with potential for dual use of research concern, pandemic pathogen or bioweapon development, as outlined in the HHS *Framework for Guiding Funding Decisions about Proposed Research Involving Enhanced Potential Pandemic Pathogens*?[45] Please describe NIH's coordination procedures with the U.S. Intelligence Community that are completed before NIH funds research projects in foreign countries with existing biodefense programs.

Please make arrangements to schedule the briefing for Committee staff by June 24, 2021. If you have any questions, please contact Alan Slobodin or Diane Cutler of the Minority Committee staff. Thank you for your attention to this request.

Sincerely,

Cathy McMorris Rodgers
Republican Leader
Committee on Energy and Commerce

Fred Upton
Republican Leader
Subcommittee on Energy

[45] U.S. Department of Health and Human Services, *Framework for Guiding Funding Decisions about Proposed Research Involving Enhanced Potential Pandemic Pathogens*, Science Safety Security (Dec. 2017) *available at* https://www.phe.gov/s3/dualuse/Pages/p3co.aspx.

Bob Latta
Republican Leader
Subcommittee on Communications and Technology

Brett Guthrie
Republican Leader
Subcommittee on Health

David McKinley
Republican Leader
Subcommittee on Environment and Climate Change

H. Morgan Griffith
Republican Leader
Subcommittee on Oversight and Investigations

Gus Bilirakis
Republican Leader
Subcommittee on Consumer Protection and Commerce

Michael C. Burgess, M.D.
Member of Congress

Steve Scalise
Member of Congress

Adam Kinzinger
Member of Congress

Bill Johnson
Member of Congress

Billy Long
Member of Congress

Larry Bucshon, M.D.
Member of Congress

Markwayne Mullin
Member of Congress

Richard Hudson
Member of Congress

Tim Walberg
Member of Congress

Earl L. "Buddy" Carter
Member of Congress

Jeff Duncan
Member of Congress

Gary Palmer
Member of Congress

Neal P. Dunn, M.D.
Member of Congress

John Curtis
Member of Congress

Debbie Lesko
Member of Congress

Greg Pence
Member of Congress

Dan Crenshaw
Member of Congress

John Joyce, M.D.
Member of Congress

Kelly Armstrong
Member of Congress

EXHIBIT 26

EXHIBIT 26

FRANK PALLONE, JR., NEW JERSEY
CHAIRMAN

CATHY McMORRIS RODGERS, WASHINGTON
RANKING MEMBER

ONE HUNDRED SEVENTEENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE

2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115
Majority (202) 225-2927
Minority (202) 225-3641

July 21, 2021

The Honorable Francis Collins, M.D., Ph.D.
Director
National Institutes of Health
9000 Rockville Pike
Bethesda, MD 20892

Dear Dr. Collins,

According to its mission statement, a goal of the National Institutes of Health (NIH) is "to exemplify . . .the highest level of scientific integrity and public accountability."[1] However, under your leadership, the NIH is falling short of that goal. On March 18, 2021, we sent NIH a detailed, eleven-page request for information about origins of the COVID-19 pandemic, which the public deserves to see. Three months later, the NIH has refused to cooperate with that request. The NIH has not provided a single document to us or made any document available to the public that responds directly to the paramount question of whether NIH funding played a role in risky research in China that could have started the pandemic.

We specifically requested documents related to National Institute of Allergy and Infectious Diseases (NIAID) grant R01AI110964, "Understanding the Risk of Bat Coronavirus Emergence" to EcoHealth Alliance that in part funded the Wuhan Institute of Virology (WIV) research into bat coronaviruses. The NIH has not provided the documents and did not provide written responses to any of the 29 questions in the March 18th letter. Instead, the NIH only provided a one-hour oral briefing to bipartisan committee staff with no documents to address any of the topics covered by the 29 questions in the March 18th letter. Additionally, no subject matter experts from the NIAID were included in the briefing, even though we specifically requested to hear from NIAID, which is the NIH institute responsible for issuing this grant. The only written response provided by the NIH was a two-page May 21, 2021, letter signed by NIH Principal Deputy Director Lawrence Tabak that did not address any of the questions in the March 18th letter, but instead stated:

[1] National Institutes of Health, *Mission and Goals*, What We Do (accessed July 14, 2021) *available at* https://www.nih.gov/about-nih/what-we-do/mission-goals.

> The application [from EcoHealth Alliance] was subjected to rigorous peer review and did not propose research to enhance any coronavirus to be more transmissible or virulent. The research proposed in the grant application sought to understand how bat coronaviruses evolve naturally in the environment to become transmissible to the human population. This included studying viral diversity in bat reservoirs, surveying people who work in live animal markets or other jobs with high exposure to wildlife for evidence of bat-coronavirus infection, and analyzing data to predict which newly discovered viruses pose the greatest threat to human health. To support its work, EcoHealth made sub-awards to the Wuhan Institute of Virology and other institutions based in East Asia where coronaviruses tend to emerge and are prevalent. NIH is not currently funding the Wuhan Institute of Virology.[2]

In addition, the NIH has denied supporting "gain-of-function" research at the WIV through this NIAID grant. For example, NIAID Director Dr. Anthony Fauci testified, "The NIH has not ever and does not now fund gain-of-function research in the Wuhan Institute of Virology."[3] You also stated: "Let me be very clear, we never approved any grant that would have supported gain of function research on dangerous coronaviruses to see if they could be more transmissible or lethal for individuals in the human species."[4] Yet, the NIH has declined to produce the underlying grant documents and records to substantiate these assertions. Importantly, the NIH has not provided complete information about exactly what the NIH did support at the WIV.

Based on published reports over the last few months and the NIH's June 28, 2021, briefing with bipartisan committee staff, we have reason to believe that the NIH may have funded humanized mice experiments at the WIV, and that such experiments may have had the potential to start the pandemic. This recent information seems contrary to NIH's characterizations of the EcoHealth grant and WIV research at issue.

Further, recent documents obtained under the Freedom of Information Act (FOIA) reveal that an NIAID official visited the WIV in 2017, and that NIAID had familiarity with the WIV research on bat coronaviruses and that some of these viruses could be transmissible to humans.

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[2] NIH did not identify by name the "other institutions based in East Asia where coronaviruses tend to emerge and are prevalent" in its letter. The only institution (singular) other than the WIV reported by EcoHealth Alliance as a sub-grant recipient for this grant is the Wuhan University, the same institution from which a researcher requested NIH to remove its submissions to the NIH Sequence Read Archive (SRA) database and NIH removed them. Dr. Jesse Bloom of the Fred Hutchinson Cancer Center recovered some of the removed sequence data and determined that the sequences related to the SARS CoV-2 early Chinese COVID-19 patients.

[3] Lori Robertson, *The Wuhan Lab and the Gain-of-Function Disagreement*, FactCheck.org (July 1, 2021) *available at* https://www factcheck.org/2021/05/the-wuhan-lab-and-the-gain-of-function-disagreement/./. We note collaborative projects between Dr. Ralph Baric of the University of North Carolina at Chapel Hill and the WIV, have produced research articles that describe Gain-of-Function research experiments when the WIV was technically funded through a USAID cooperative agreement facilitated by a consortium that included EcoHealth Alliance.

[4] Samuel Chamberlain, NIH head accuses Rand Paul of 'misinformation' about US ties to Wuhan lab New York Post (May 14, 2021) available at https://nypost.com/2021/05/14/nih-head-accuses-rand-paul-of-misinformation-about-us-ties-to-wuhan-lab/.

NIAID indirectly continued to fund the WIV research despite concerns about biosafety practices at the WIV raised in 2018 State Department cables, which were based in part on the NIAID visit in 2017.

First, we note that the FY 2018 abstract for the EcoHealth Alliance NIAID "Understanding the Risk of Bat Coronavirus Emergence" grant renewal openly discussed experiments with humanized mice. The abstract for the project declared that aim number three of the research project was to: "3. Test predictions of CoV inter-species transmission. Predictive models of host range (i.e. emergence potential) will be tested experimentally using reverse genetics, pseudovirus and receptor binding assays, and virus infection experiments across a range of cell cultures from different species and humanized mice." (emphasis added).[5] As noted by science writer Nicholas Wade, in such experiments, "laboratory mice, a cheap and ethical stand-in for human subjects, are genetically engineered to carry the human version of a protein called ACE2 that studs the surface of cells that line the airways."[6]

Second, a recent article in Vanity Fair reported that the WIV and its bat coronavirus research director, Dr. Shi Zhengli, were involved with experiments in humanized mice in recent years. The article stated that "Shi's own comments to a science journal, and grant information available on a Chinese government database, suggest that in the past three years her team has tested two novel but undisclosed bat coronaviruses on humanized mice, to gauge their infectiousness."[7]

Third, such experiments have pandemic potential. As the EcoHealth Alliance wrote in the FY 2019 abstract for this same NIH grant, "We will use S protein sequence data, infectious clone technology, in vitro and in vivo infection experiments and analysis of receptor binding to test the hypothesis that % divergence thresholds in S protein sequences predict spillover potential."[8] Mr. Wade further explained the implications of this research:

> What this means, in non-technical language, is that Shi set out to create novel coronaviruses with the highest possible infectivity for human cells. Her plan was to take genes that coded for spike proteins possessing a variety of measured affinities for human cells, ranging from high to low. She would insert these spike genes one by one into the backbone of a number of viral genomes ("reverse genetics" and "infectious clone technology"), creating a series of chimeric viruses. These chimeric viruses would then be tested for their ability to attack human cell cultures ("in vitro") and humanized mice ("in vivo"). And this information would help

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[5] Grantome NIH, Abstract for Understanding the Risk of Bat Coronavirus Emergence, EcoHealth Alliance Inc. FY 2018 available at https://grantome.com/grant/NIH/R01-AI110964-05.

[6] Nicholas Wade, *The origin of COVID: Did people or nature open Pandora's box at Wuhan?,* Bulletin of the Atomic Scientists, (May 5, 2021). *available at* https://thebulletin.org/2021/05/the-origin-of-covid-did-people-or-nature-open-pandoras-box-at-wuhan/.

[7] Katherine Eban, *The Lab Leak Theory: Inside the Fight to Uncover COVID 19's origins,* Vanity Fair (June 3, 2021), *available at* https://www.vanityfair.com/news/2021/06/the-lab-leak-theory-inside-the-fight-to-uncover-covid-19s-origins.

[8] Grantome NIH, Abstract for Understanding the Risk of Bat Coronavirus Emergence, EcoHealth Alliance Inc. FY 2019 available at https://grantome.com/grant/NIH/R01-AI110964-05.

> predict the likelihood of "spillover," the jump of a coronavirus from bats to people.
>
> The methodical approach was designed to find the best combination of coronavirus backbone and spike protein for infecting human cells. The approach could have generated SARS2-like viruses, and indeed may have created the SARS2 virus itself with the right combination of virus backbone and spike protein.[9]

From his review of WIV research, Dr. Richard Ebright, a molecular biologist and biosafety expert at Rutgers University, stated, "It is clear that the Wuhan Institute of Virology was systematically constructing novel chimeric coronaviruses and was assessing their ability to infect human cells and human-ACE2-expressing mice."[10] He further stated, "It is also clear that, depending on the constant genomic contexts chosen for analysis, this work could have produced SARS-CoV-2 or a proximal progenitor of SARS-CoV-2."[11]

Even Dr. Peter Daszak, the President of EcoHealth Alliance, noted the humanized mice and the risks of this research in a December 2019 interview.[12] Around minute 28 of the interview, Dr. Daszak stated:

> And we have now found, you know, after 6 or 7 years of doing this, over 100 new SARS-related coronaviruses, very close to SARS. Some of them get into human cells in the lab, some of them can cause SARS disease in humanized mice models and are untreatable with therapeutic monoclonals and you can't vaccinate against them with a vaccine. So, these are a clear and present danger….[13]

Likewise, Dr. Steven Quay noted the unique characteristic of efficient human-to-human transmission of SARS-CoV-2 in his testimony before the June 29, 2021, House Republican Forum that the SARS CoV-2 virus was "highly adapted for infection of humans from the start, unlike prior natural zoonoses. And growth in humanized mice would allow this lab [adaptation]," [14] like in a March 2020 published paper by Dr. Ralph Baric of University of North Carolina and Dr. Shi of the WIV.

Fourth, the NIH in the June 28, 2021, staff briefing acknowledged that the NIH-funded research at the WIV involved mice. One of the two NIH briefers, Dr. Tabak stated that the only animals that were used in this NIH-funded research at the WIV were mice. However, to date, the

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[9] Wade, note 5.
[10] *Id.*
[11] *Id.*
[12] Vincent Racaniello, *TWiV 615: Peter Daszak of EcoHealth Alliance - YouTube*, This Week in Virology, (May 19, 2020), *available at* https://www.youtube.com/watch?app=desktop&v=IdYDL_RK--w.
[13] *Id.*
[14] Led By Science: The COVID-19 Origin Story: Forum Before Select Subcomm. on the Coronavirus Crisis, H. Comm. on Oversight & Reform, 117th Cong. (June 29, 2021) (statement by Dr. Steven Quay).

NIH has not clarified to the Committee whether the mice used in the NIH-supported research were *humanized* mice.

Fifth, humanized mice have not been ruled out as an intermediate animal host. According to the World Health Organization joint study with China, more than 80,000 animal samples were tested with no positive results for either SARS CoV-2 antibodies or for the virus itself in an attempt to identify the intermediate animal host to support the zoonotic origins theory.[15] There is no evidence that any of these samples included samples of humanized mice at the WIV.

Finally, on October 26, 2017, Dr. Ping Chen, the Director of the NIAID office in China located in the U.S. embassy in Beijing, wrote to several NIAID officials stating that earlier in the week she had visited the P4 lab at the WIV and that her contact who helped arrange the visit was Dr. Zhengli Shi, "who is a Chinese collaborator on a NIAID grant to EcoHealth for SARS like corona virus project." [16]

Unfortunately, the rest of this email and the trip report were redacted. But, in an April 15, 2020, email sent to Gray Handley of the NIAID with the subject "FW: 2018 Cable" with the January 2018 State Department cable attached, Dr. Chen stated: "Rick forwarded the cable. I was listed as a drafter. About half of the content was taken from my summary."[17] The January 2018 State Department cable discussed the BSL-4 lab at the WIV, China investing in infectious disease control, unclear guidelines on virus access, the lack of trained talent impeding research, and despite limitations, WIV researchers produce SARS discoveries. For the last topic, the cable noted the WIV research finding "strongly suggests that SARS-like coronaviruses from bats can be transmitted to humans to cause SARS-like disease."[18] These redacted documents provide a reason to believe that the NIH – or at least the NIAID – had a much higher level of engagement and familiarity with the EcoHealth Alliance grant and WIV bat coronavirus research than just reading press reports during April-July 2020 as NIH suggested at the June 28, 2021, briefing with bipartisan Committee staff.[19]

Over 600,000 Americans have died from COVID-19 and more than 4 million people worldwide. We need answers to some basic questions about the origin of the virus, and yet, the NIH continues to frustrate our efforts to get answers. The stakes are too high to operate on an

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[15] World Health Organization, *WHO-convened Global Study of the Origins of SARS-CoV-2* (March 30, 2021) *available at* https://www.who.int/health-topics/coronavirus/origins-of-the-virus.

[16] Judicial Watch, *Judicial Watch: New Documents Show Wuhan Lab Asked NIH Official for Information on Disinfectants; Nine Fauci Agency Grants for EcoHealth Bat Coronavirus Research*, Press Releases (July 8, 2021) *available at* https://www.judicialwatch.org/press-releases/wuhan-lab-fauci-grants/.

[17] *Id.*

[18] Josh Rogin, *Opinion: State Department cables warned of safety issues at Wuhan lab studying bat coronaviruses*, The Washington Post (April 14, 2020) *available at* https://www.washingtonpost.com/opinions/2020/04/14/state-department-cables-warned-safety-issues-wuhan-lab-studying-bat-coronaviruses/.

[19] Based on the questions the NIH Office of Extramural Research asked EcoHealth Alliance, it is unclear that NIH maintained control, oversight or responsibility of EcoHealth Alliance as its grantee. For example, in an April 2020 email to EcoHealth Alliance, the NIH Deputy Director of Extramural Research, Dr. Michael Lauer, asked EcoHealth Alliance for information about this same grant, to include, "…**it would be helpful for us to know about *all* China-based participants in this work since the Type 1 grant started in 2014 - who they were and how much money they received."**

honor system. This not only undermines NIH's mission goals, but also Congress' and the public's trust in the NIH. It is time for the NIH to share all information and documents that it has related to NIAID grant R01AI110964 with the public and the scientific community.

Therefore, we request that the NIH provide all documents related to the October 2017 visit to the WIV, all documents related to NIAID grant R01AI110964, and the identities of the "other institutions" referenced in NIH's May letter by July 28, 2021. In addition, we request staff briefings immediately and no later than July 28, 2021, with the following officials from NIAID: Dr. Ping Chen and Dr. Erik Stemmy, the program officer for NIAID grant R01AI110964.

If you have any questions, please contact Alan Slobodin or Diane Cutler of the Minority Committee staff.

Sincerely,

Cathy McMorris Rodgers
Republican Leader
Committee on Energy and Commerce

Brett Guthrie
Republican Leader
Subcommittee on Health

H. Morgan Griffith
Republican Leader
Subcommittee on Oversight and Investigations

CC: The Honorable Frank Pallone, Chairman
The Honorable Anna Eshoo, Chair, Subcommittee on Health
The Honorable Diana DeGette, Chair, Subcommittee on Oversight and Investigations

EXHIBIT 27

EXHIBIT 27

FRANK PALLONE, JR., NEW JERSEY
CHAIRMAN

CATHY McMORRIS RODGERS, WASHINGTON
RANKING MEMBER

ONE HUNDRED SEVENTEENTH CONGRESS

Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115
Majority (202) 225-2927
Minority (202) 225-3641

August 24, 2021

The Honorable Francis Collins, M.D., Ph.D.
Director
National Institutes of Health
9000 Rockville Pike
Bethesda, MD 20892

Dear Dr. Collins,

We have significant concerns that the National Institutes of Health (NIH) has not been adequately meeting its oversight responsibilities over the National Institute of Allergy and Infectious Diseases (NIAID) grant R01AI110964, "Understanding the Risk of Bat Coronavirus Emergence." The grant was awarded to the non-profit organization, EcoHealth Alliance, that funneled NIH funds to the Wuhan Institute of Virology (WIV) to conduct research on bat coronaviruses. In our July 21, 2021, letter to you, we requested that the NIH provide staff briefings with Dr. Ping Chen and Dr. Erik Stemmy, NIAID officials involved with this grant and responsibility for oversight of the WIV. Unfortunately, the NIH has ignored this request.

In addition to potentially inadequately assessing the inherent risks of the WIV research supported by NIH's grant, we are also concerned that the NIH failed to oversee biosafety concerns at the WIV. The WIV is a complex of laboratories with various Biosafety Level (BSL) levels up to a BSL-4, the most secure biosafety level laboratory. However, under the R01AI110964 grant, the WIV researchers specifically reported performing coronavirus research in BSL-2 laboratories.[1] Yet, risky coronavirus research should have been conducted in a laboratory with higher safety measures.

The grant award R01AI110964 was subject to biosafety requirements as acknowledged by NIH in its the July 8, 2020, grant suspension letter to EcoHealth Alliance: "NIH grantees and subawardees must comply with the biosafety requirements set forth in the NIH Grants Policy

[1] Lei-Ping Zeng, Peter Daszak, Zheng-Li Shi, et al, *Bat Severe Acute Respiratory Syndrome-Like Coronavirus WIV1 Encodes an Extra Accessory Protein, ORFX, Involved in Modulation of the Host Immune Response*, ASM Journal of Virology (June 24, 2016) *available at* https://journals.asm.org/doi/full/10.1128/JVI.03079-15,

Statement (*see* NIH GPS, § 4.1.24 'Public Health Security') and the Notice of Award (*e.g.*, requiring that 'Research funded under this grant must adhere to the [CDC/NIH Biosafety in Microbiological and Biomedical Laboratories (BMBL)])."

These requirements are especially relevant given the history of serious lab accidents in China.[2] In 1977, the H1N1 influenza virus escaped from a lab in China that caused a worldwide pandemic.[3] Two lab escapes of the first SARS virus in China were reported in the spring of 2004.[4] Most recently in November 2019, an outbreak of brucellosis occurred in two research centers in Lanzhou, China, infecting over 100 students and staff members.[5] Chinese experts have also raised concerns about laboratory safety in their own country, lamenting that "lab trash can contain man-made viruses, bacteria or microbes" and that "some researchers discharge laboratory materials into the sewer after experiments without a specific biological disposal mechanism."[6]

We would expect the NIH to know about this history of lab accidents, and to know that Chinese researchers were conducting bat coronavirus work in BSL-2 labs. For example, bat coronavirus expert Dr. Ralph Baric of the University of North Carolina observed that "Historically, the Chinese have done a lot of their bat coronavirus research under BSL-2 conditions. Obviously, the safety standards of BSL-2 are different than BSL-3, and lab-acquired infections occur much more frequently at BSL-2. There is also much less oversight at BSL-2."[7]

There is evidence that WIV conducted other coronavirus propagation research in BSL-2 facilities. We would expect that the NIH would know this as well, since the evidence is in published literature and presumably in NIH grant progress reports. For example, in 2016, the WIV and EcoHealth Alliance published a study partially funded by the NIAID grant that noted the following:

> The SL-CoV WIV1 strain (GenBank accession number KF367457) and other viruses were propagated as described previously (2). Sendai virus (SeV) strain Cantell (kindly provided by Hanzhong Wang) was propagated in 10-day-old embryonated chicken eggs at 37°C for 48 h (24). **All experiments using live virus was conducted under biosafety level 2 (BSL2) conditions**.[8] (Emphasis added).

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[2] Rossana Segreto and Yuri Deigin, The genetic structure of SARS-CoV-2 does not rule out a laboratory origin, Wiley Online Library (Nov. 17, 2020) *available at* https://onlinelibrary.wiley.com/doi/full/10.1002/bies.202000240.
[3] *Id.*
[4] *Id.*
[5] *Id.*
[6] Liu Caiyu and Leng Shumei, *Biosafety guideline issued to fix chronic management loopholes at virus labs*, Global Times (Feb. 16, 2020) *available at* https://www.globaltimes.cn/content/1179747.shtml.
[7] Rowan Jacobsen, *We never created a supervirus* Ralph Baric explains gain-of-function research, MIT Tech Review (July 26, 2021) *available at* https://www.technologyreview.com/2021/07/26/1030043/gain-of-function-research-coronavirus-ralph-baric-vaccines/.
[8] Lei-Ping Zeng, *et al*, *Bat Severe Acute Respiratory Syndrome-Like Coronavirus WIV1 Encodes an Extra Accessory Protein, ORFA, Involved in Modulation of the Host Immune Response,* Journal of Virology, (Jul. 15, 2016) *available at* https://archive.ph/dQRTH#selection-1225.0-1245.93

We would also expect that the NIH would recognize that the NIAID grant was supporting deficient and potentially dangerous biosafety practices. We note that Dr. Baric stated all his research studies on bat coronaviruses are conducted in BSL-3 plus conditions, and that he would not conduct the WIV's experiments in BSL-2 labs. Dr. Baric said: "There's definitely some risk associated with these and other SARS-like bat viruses that can enter human cells."[9]

Further, the "Biosafety in Microbiological and Biomedical Laboratories" (BMBL) manual, co-authored by the NIH explains:

> Biosafety Level 3 is applicable to clinical, diagnostic, teaching, research, or production facilities where work is performed with indigenous or exotic agents **that may cause serious or potentially lethal disease through the inhalation route of exposure**. [Emphasis added] Laboratory personnel must receive specific training in handling pathogenic and potentially lethal agents, and must be supervised by scientists competent in handling infectious agents and associated procedures.[10]

For this reason, the Centers for Disease Control and Prevention required that live virus samples of SARS CoV2 could only be shipped to BSL-3 labs.[11]

NIH has admitted awareness of biosafety concerns at the WIV. In its July 8, 2020, letter to EcoHealth Alliance, NIH acknowledged receiving reports of serious biosafety concerns at the WIV:

> However, as you are aware, the NIH has received reports that the Wuhan Institute of Virology (WIV), a subrecipient of EcoHealth Alliance under R01AI110964, has been conducting research at its facilities in China that pose serious bio-safety concerns and, as a result, create health and welfare threats to the public in China and other countries, including the United States.

NIH expressed its concerns that EcoHealth Alliance and the WIV had not satisfied safety requirements as recipients of NIH grant funds. NIH further acknowledged in the July 8, 2020, letter: "We have concerns that WIV has not satisfied safety requirements under the award, and that EcoHealth Alliance has not satisfied its obligations to monitor the activities of its subrecipient to ensure compliance." Specifically, former U.S. Deputy Assistant Secretary of State, David Feith, stated that he had uncovered safety issues at the WIV: "There was work with very dangerous viruses carried out at Biosafety Level 2, which has been compared to the safety level roughly of a dentist's office."[12]

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[9] Rowan Jacobsen, *We never created a supervirus* Ralph Baric explains gain-of-function research, MIT Tech Review (July 26, 2021) *available at* https://www.technologyreview.com/2021/07/26/1030043/gain-of-function-research-coronavirus-ralph-baric-vaccines/.

[10] Lei-Ping Zeng, *Bat Severe Acute Respiratory Syndrome-Like Coronavirus WIV1 Encodes an Extra Accessory Protein, ORFX, Involved in Modulation of the Host Immune Response,* (Jun 24, 2016) *available at* https://www.cdc.gov/labs/pdf/CDC-BiosafetymicrobiologicalBiomedicalLaboratories-2009-P.pdf.

[11] Glenn Rockman, *To accelerate innovation, the CDC should ease limits on which labs can handle the coronavirus,* STAT (Apr. 14, 2020) *available at* https://www.statnews.com/2020/04/14/allow-bsl-2-labs-handle-novel-coronavirus/.

[12] CBS News, *GOP seeks records on possible U.S. funding of research at Chinese lab before pandemic* (July 22, 2021) *available at* https://www.cbsnews.com/news/gop-pressing-for-records-on-possible-us-funding-research-chinese-lab-before-pandemic/.

Though the NIH wrote in its July 8, 2020, letter to EcoHealth Alliance that U.S. State Department cables in 2018 raised safety concerns about the WIV, the NIH failed to acknowledge how its own scientist stationed in Beijing, Dr. Ping Chen of NIAID, personally visited the WIV in 2017 and co-wrote one of the 2018 U.S. State Department warning cables. The information about NIH's awareness of the WIV safety concerns and its part in supplying that information to the U.S. State Department, only became publicly known from recently released NIH emails in response to Freedom of Information Act requests. Although a representative from the NIAID played a critical role in the 2018 State Department cables raising concerns about the WIV, there is no record of NIH taking any oversight action regarding the EcoHealth Alliance grant until after April 14, 2020, when these Department cables were publicly revealed in a Washington Post column.

There is no apparent justification for NIH officials to permit the NIAID grant to support BSL-3 research at the BSL-2 level. When propagating a coronavirus and the risks of the research are unknown, work must be done in a BSL-3 lab until it is verified and confirmed that propagating a virus does not raise a public health concern. Only after such confirmation can the research be moved to BSL-2. The NIH, in accordance with its own policies and BMBL, should have required EcoHealth Alliance to ensure that all SARS CoV research by its sub-grantee was done in a BSL-3 lab. Even if the research did not meet a technical definition of gain-of-function research, we have concerns that NIH failed to address the potential risks associated with virus propagation research in a BSL-2 lab with pathogens like SARS CoV that has of Dual Use of Research Concern (DURC) potential, a research category of which gain-of-function research is a subset. Further, NIH's belated oversight interest in this grant in 2020 has been completely ineffective, and NIH has shown no interest or capability in getting compliance from its grantee EcoHealth Alliance.

EcoHealth Alliance's grant remains suspended in-house with NIH, though the NIH through the Department of Health and Human Services has failed to report publicly the grant suspension on the www.SAM.gov database, which provides a reporting mechanism that can alert other U.S. Government agencies of risky non-compliant behavior of grant recipients. For over a year, EcoHealth Alliance has not complied with the terms of the NIH award. In the June 28, 2021, virtual meeting with Committee staff, NIH gave no indication of any interest in taking further action against EcoHealth Alliance for award noncompliance. In fact, when asked if they would further pursue information gathering from EcoHealth Alliance, NIH stated that all of EcoHealth's research had been published. In order for NIH to be convinced they should take action to obtain NIH-funded data from EcoHealth Alliance, NIH put the burden on the Minority committee staff to supply documented statements from EcoHealth Alliance indicating that EcoHealth Alliance represented that they are in possession of unpublished bat coronavirus sequences. Despite the Minority staff supplying such statements, there is still no indication from NIH that they will do anything on this front.

As indicated by the NIH's July 8, 2020, letter suspending EcoHealth Alliance's grant, the NIH and the grantee are not absolved from ensuring sound biosafety practices regardless of the merits of the research. After first notifying EcoHealth Alliance in April 2020 that it must provide information to NIH to be in compliance with the terms of its grant for project number R01AI110964, NIAID separately awarded a $3 million cooperative agreement in June 2020 to EcoHealth Alliance, followed by another cooperative agreement award to EcoHealth Alliance in September 2020 for $1.15 million.[13] After notifying EcoHealth Alliance that their funding would stop until they complied with NIH's requests for information, providing additional funding to EcoHealth Alliance in $4.5 million in NIAID cooperative agreements thereby undercut NIH's ability to get EcoHealth Alliance to comply with NIH's requests for information on biosafety practices and other issues at the WIV. The new funding to EcoHealth Alliance suggests that the NIH is not serious about oversight of NIH grants and, more specifically, its compliance requests of EcoHealth Alliance in its July 8, 2020, letter.

NIH's conduct in this case raises serious doubts about NIH's competent stewardship of research funds. If the NIH continues down this path, the NIH risks losing substantial public support and risks undermining public health efforts that are based on trust in NIH.

We urge you to be transparent and produce all documents and information related to the NIAID grant and to provide in writing the NIH's complete understanding of the NIH-supported research conducted at the WIV by September 7, 2021. Please immediately make arrangements to schedule the staff briefings with Dr. Ping Chen and Dr. Erik Stemmy. Finally, in light of our concerns, please respond to the following:

1. In recent testimony before the Senate Committee on Health, Education, Labor and Pensions, Dr. Anthony Fauci, Director of NIAID, testified that the WIV research in question "was judged by qualified staff up and down the chain as not being gain of function."
    a. Please provide names and positions of the staff involved. Please provide details on the scope of the review and the process for how the review was conducted. Please identify all documents used in the review and submit these documents.

    b. Did the staff review the biosafety practices and BSL level of labs that were involved with the WIV research? If so, what were their findings?

    c. Did the staff know how many novel coronaviruses were being studied at the WIV? If so, please provide the information.

    d. Were staff aware of the WIV's standard operating procedures for working with a novel coronavirus? If so, please provide the information.

[13] USA Spending.gov, *EcoHealth Alliance*, Advanced Recipient Search (Aug. 2, 2021) *available at* https://www.usaspending.gov/search/?hash=b2b11ac84d498190e8e69a33c04cdd99.

e. Were staff aware of how the WIV collected virus samples? If so, please provide the information.

f. Were staff aware of the standard operating procedures at the WIV for propagating or culturing viruses? If so, please provide the information.

g. Did the staff have information on the biosafety procedures at the WIV designed to prevent potential exposure events? If so, please provide the information.

h. Did the staff know what cell lines were used at the WIV? If so, please provide the information.

i. Did the staff know what safety measures were used at the WIV to prevent cross-contamination? If so, please provide the information.

j. Did the staff have information on the training records of the staff? If so, please provide the information.[14]

2. Since EcoHealth Alliance still has its NIAID grant suspended due to lack of cooperation with the NIH, why is NIAID continuing to fund EcoHealth Alliance through other cooperative agreements?

3. When did the NIH first recognize biosafety concerns at the WIV? What actions were taken?

If you have any questions, please contact Alan Slobodin or Diane Cutler of the Minority Committee staff.

Sincerely,

Cathy McMorris Rodgers
Ranking Member
Committee on Energy and Commerce

Brett Guthrie
Ranking Member
Subcommittee on Health

[14] Sub-questions (g), and (j) were suggested by Dr. Ralph Baric to MIT Tech Review, note 9.

H. Morgan Griffith
Ranking Member
Subcommittee on Oversight and
Investigations

CC: The Honorable Frank Pallone, Chairman
The Honorable Anna Eshoo, Chair, Subcommittee on Health
The Honorable Diana DeGette, Chair, Subcommittee on Oversight and Investigations

EXHIBIT 28

EXHIBIT 28

FRANK PALLONE, JR., NEW JERSEY
CHAIRMAN

CATHY McMORRIS RODGERS, WASHINGTON
RANKING MEMBER

ONE HUNDRED SEVENTEENTH CONGRESS

Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115
Majority (202) 225-2927
Minority (202) 225-3641

October 27, 2021

The Honorable Francis Collins, M.D., Ph.D.
Director National Institutes of Health
9000 Rockville Pike
Bethesda, MD 20892

Dr. Collins,

We write again asking the National Institutes of Health (NIH) to be transparent about its relationship with EcoHealth Alliance (EcoHealth) and to provide information and documents related to National Institute of Allergy and Infectious Diseases (NIAID) grant project number R01AI110964, "Understanding the Risk of Bat Coronavirus Emergence."[1] In 2014, NIH awarded this grant to EcoHealth, the non-profit organization that in turn funneled those funds to the Wuhan Institute of Virology (WIV)[2] and to additional research organizations to support risky research in China.

Since March 2021, we have led a comprehensive examination of how the COVID-19 pandemic started. Understanding the root cause of this pandemic will help us prevent future pandemics. We are examining in connection with this effort whether NIH oversight of risky research conducted by an NIH sub-grantee in China was adequate to prevent or render it implausible that a lab accident could have been involved in the origins of the pandemic. Based on a review of documents and other information recently made available, we have significant

[1] This is our fourth letter to NIH seeking information related to oversight of NIAID's grant R01AI110964. Our prior letters dated March 18, 2021, July 21, 2021 and August 24, 2021 are available at https://republicans-energycommerce.house.gov/the-covid-19-origins-investigation/. At this time, NIH has yet to respond in writing to any of the questions in these letters, and only produced EcoHealth grant documents to us after HHS had released them to *The Intercept* in response to a Freedom of Information Act lawsuit.

[2] This funding was in addition to USAID funding to EcoHealth that was also funneled to the WIV during this timeframe. USA Spending.gov, *EcoHealth Alliance*, Advanced Recipient Search (Aug. 2, 2021), *available at* https://www.usaspending.gov/search/?hash=b2b11ac84d498190e8e69a33c04cdd99. An April 6, 2016 correction to the Nov. 20, 2015 research article acknowledged the USAID-EPT-PREDICT funding source from EcoHealth Alliance to Zhengli Shi. Menachery, V. *et al,Correction: Corrigendum: A SARS-like cluster of circulating bat coronaviruses shows potential for human emergence*, Nature Medicine (Apr. 6, 2016), *available at* https://www.nature.com/articles/nm0416-446d.

concerns about the adequacy of NIH oversight of EcoHealth and the related research activities at the WIV and other organizations in China.

In 2016, EcoHealth proposed a research project with the WIV using humanized mice to test several chimeric viruses to see if these experiments would show whether these viruses could infect human cells. EcoHealth portrayed the risks of these experiments as if they were not of concern, and the NIH accepted EcoHealth's assertions without a searching inquiry. However, the assessment of the risks by both EcoHealth and the NIH do not seem to square with the understanding of the research risks at that time. Although the engineered viruses at the WIV were far from SARS CoV-2 on the coronavirus family tree, this research reflected a high tolerance for risk.[3] As noted by Stanford University microbiologist David Relman, "[The WIV] were essentially playing Russian roulette with the virus that the world's expert had labelled poised for human emergence. It's the willingness to manipulate them without due concern."[4]

Further, the one condition imposed by the NIH was the requirement that EcoHealth stop the humanized mice experiment and notify the NIH if the result was a virus with enhanced growth by more than ten times (or one log) compared to the parental backbone or strains found in nature. The purpose of this policy was to safeguard against experiments creating viruses that could replicate quickly and had the potential to overwhelm the immune systems of humans. We believe the EcoHealth grant documents indicated such a reportable result from the experiment, but there is no evidence of EcoHealth taking the required actions, or the NIH raising any questions after getting the results of the experiment from EcoHealth. If EcoHealth and NIH could not handle compliance and oversight of such a basic policy, it raises more concerns about the overall adequacy of the oversight of this research, which leaves the public vulnerable to a serious lab accident.

In addition to how NIH examined the research proposal, the funding of EcoHealth by NIH after the suspension of their grant raises serious concerns about NIH's management and oversight of grants. Following an initial grant termination in April 2020, NIH reinstated the grant and then suspended the grant in July 2020 because of EcoHealth's inadequate oversight of the WIV.[5] When NIH asked EcoHealth to provide information related to its subaward to the WIV, EcoHealth refused to comply with most of the requests.[6] Despite EcoHealth's unwillingness to cooperate, NIH paid an additional $369,819 to EcoHealth on July 13, 2020, a mere five days after its grant was suspended. NIH's payment seems inconsistent with NIH's grant policy and possibly violates other federal laws and regulations.[7]

NIH also failed to report EcoHealth's noncompliance and grant suspension into the www.SAM.gov database that alerts other U.S. Government agencies to risky grant recipients. Remarkably, the NIH, U.S. Agency for International Development (USAID), and Department of Defense (DoD) have paid EcoHealth more than $23.4 million in new and renewed assistance

[3] Carolyn Korman, *The Mysterious Case of the COVID-19 Lab Leak Theory*, The New Yorker (October 12, 2021), *available at* https://www.newyorker.com/science/elements/the-mysterious-case-of-the-covid-19-lab-leak-theory.
[4] *Id.*
[5] Mark Moore, *NIH investigating Wuhan lab at center of coronavirus pandemic*, NEW YORK POST (Apr. 28, 2020), *available at* https://nypost.com/2020/04/28/nih-investigating-wuhan-lab-at-center-of-coronavirus-pandemic/.
[6] *Id.* EcoHealth did report select subgrant funding data on July 13, 2020 into a public database. NIH had raised concerns that EcoHealth had not accounted for its funding of subgrantees.
[7] USA Spending.gov, *EcoHealth Alliance*, Advanced Recipient Search (Oct. 13, 2021), *available at* https://www.usaspending.gov/award/ASST_NON_R01AI110964_7529.

awards since April 2020, when NIH should have reported the administrative action it took against EcoHealth's grant. To date, NIH has refused to address any of these concerns.

We outline our concerns in more detail about NIH's oversight of the EcoHealth grant in the discussion that follows.

Grant Documents and Other Information Made Recently Available

On September 7, 2021, after the Department of Health and Human Services (HHS) produced documents related to the EcoHealth grant because of a Freedom of Information Act (FOIA) lawsuit, HHS shared essentially the same documents with us.[8] On September 29, 2021, Principal Deputy Director Lawrence Tabak briefed bipartisan Committee staff about the EcoHealth grant documents. Unfortunately, HHS and NIH did not accommodate the staff request to include subject matter experts and witnesses with first-hand knowledge from NIAID in this briefing. HHS arranged an in-person bipartisan Committee staff *in camera* review of the printed copies of the four highly relevant letters between NIH and EcoHealth about EcoHealth's humanized mice research proposal. These documents raise significant concerns about NIH's management and oversight of the EcoHealth grant.[9]

HHS Oversight Policy of Gain-of-Function Research Was Weakened in Recent Years

On August 30, 2021, the *Washington Post* published an article, *A Science in the Shadows*, detailing how the HHS oversight process over risky research, often referred to as Gain-of-Function (GOF) research, was weakened in recent years from the policy established in 2012.[10] For example, in December 2017, the review process known as the *HHS Framework for Guiding Funding Decisions about Proposed Research Involving Enhanced Potential Pandemic Pathogens Care and Oversight* (P3CO) was revised to remove any authority by the HHS P3CO review group to block GOF research proposals.[11] Instead, HHS redefined GOF research, which has given NIH leaders the sole discretion to approve GOF projects without referring them to the HHS PC3O review group.[12]

In a significant policy change, the 2017 policy also narrowed the criteria for review of GOF research to cover only altered pathogens "likely capable of wide and uncontrollable spread in human populations."[13] The review policy that started in October 2014, required experiments to

[8] Sharon Lerner and Mara Hvistendahl, *New Details Emerge About Coronavirus Research at Chinese Lab*, The Intercept (Sept. 6, 2021), *available at* https://theintercept.com/2021/09/06/new-details-emerge-about-coronavirus-research-at-chinese-lab/. The NIH document production appears identical to their production to *The Intercept*, except the documents NIH provided to us do not include FOIA exemption numbers in the redactions and instead include Bates numbered pages.
[9] A bipartisan *in camera* private in-person inspection of the physical copies of four letters dated May 18, 2016, June 8, 2016, July 7, 2016, and July 5, 2018 controlled by NIH was conducted at HHS headquarters on Oct. 5, 2021, monitored by HHS staff.
[10] David Willman and Madison Muller, *A Science in the Shadows*, The Washington Post (Aug. 26, 2021), *available at* https://www.washingtonpost.com/nation/interactive/2021/a-science-in-the-shadows/.
[11] *Id.*
[12] *Id.*
[13] U.S. Department of Health and Human Services, *Framework for Guiding Funding Decisions about Proposed Research Involving Enhanced Potential Pandemic Pathogens*, Dual Use Research of Concern (Dec. 19, 2017), *available at* https://www.phe.gov/s3/dualuse/Documents/P3CO.pdf.

be reviewed if they expected to generate flu and coronaviruses that would be "transmissible among **mammals**" and might accidentally cause human infections.[14] (Emphasis added).

A GOF Experiment Warning by Dr. Ralph Baric and Others

In 2015, Dr. Ralph Baric of the University of North Carolina – Chapel Hill, Dr. Zheng-Li Shi of the WIV, and others published a study in *Nature*, titled *A SARS-Like Cluster Of Circulating Bat Coronaviruses Shows Potential For Human Emergence*.[15] Dr. Baric and Dr. Shi have each collaborated previously with EcoHealth. Importantly, EcoHealth, through its funding from USAID, helped support Dr. Shi of the WIV in this particular study.[16] Near the end of this publication, the authors issued a warning about a potential threat of certain viruses identified with the SHC014 reference number:

> We consider viruses with the SHC014 spike a potential threat owing to their ability to replicate in primary human airway cultures, the best available model for human disease. In addition, the observed pathogenesis in mice indicates a capacity for SHC014-containing viruses to cause disease in mammalian models, without RBD adaptation.[17]

In the next paragraph, the authors explain the context of GOF research and how their expectation that the viruses they created would not increase pathogenicity turned out to be wrong after they conducted the experiments:

> In addition to offering preparation against future emerging viruses, this approach must be considered in the context of the U.S. government–mandated pause on gain-of-function (GOF) studies. On the basis of previous models of emergence, the creation of chimeric viruses such as SHC014-MA15 was not expected to increase pathogenicity. Although SHC014-MA15 is attenuated relative to its parental mouse-adapted SARS-CoV, similar studies examining the pathogenicity of CoVs with the wild-type Urbani spike within the MA15 backbone showed no weight loss in mice and reduced viral replication. Thus, relative to the Urbani spike–MA15 CoV, SHC014-MA15 shows a gain in pathogenesis.[18]

The authors then explain that scientific review panels may determine that similar studies would be too risky, so any further research may be limited going forward:

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[14] The White House, *Doing Diligence to Assess the Risks and Benefits of Life Sciences Gain-of-Function Research*, Blog (Oct. 17, 2014), *available at* https://obamawhitehouse.archives.gov/blog/2014/10/17/doing-diligence-assess-risks-and-benefits-life-sciences-gain-function-research.

[15] Menachery, V. et al, *A SARS-like cluster of circulating bat coronaviruses shows potential for human emergence*, Nature Medicine (Nov.20, 2015), *available at* https://www.nature.com/articles/nm.3985.

[16] An April 6, 2016 correction to the Nov. 20, 2015 research article acknowledged the USAID-EPT-PREDICT funding source from EcoHealth Alliance to Zhengli Shi. Menachery, V. *et al*, *Correction: Corrigendum: A SARS-like cluster of circulating bat coronaviruses shows potential for human emergence*, Nature Medicine (Apr. 6, 2016), *available at* https://www.nature.com/articles/nm0416-446d.

[17] Menachery, V. et al, *A SARS-like cluster of circulating bat coronaviruses shows potential for human emergence*, Nature Medicine (Nov.20, 2015), *available at* https://www.nature.com/articles/nm.3985.pdf.

[18] *Id.*

> On the basis of these findings, scientific review panels may deem similar studies building chimeric viruses based on circulating strains too risky to pursue, as increased pathogenicity in mammalian models cannot be excluded. Coupled with restrictions on mouse-adapted strains and the development of monoclonal antibodies using escape mutants, research into CoV emergence and therapeutic efficacy may be severely limited moving forward.[19]

Finally, the authors advise that the purpose of their study – to prepare potentially for and mitigate future outbreaks – must be carefully weighed against dangers posed by the experiments creating more dangerous pathogens. Notably, the authors considered whether similar studies should be pursued:

> Together, these data and restrictions represent a crossroads of GOF research concerns; the potential to prepare for and mitigate future outbreaks must be weighed against the risk of creating more dangerous pathogens. In developing policies moving forward, it is important to consider the value of the data generated by these studies and whether these types of chimeric virus studies warrant further investigation versus the inherent risks involved.[20]

Letters Reveal NIH and EcoHealth Discussed GOF Research Concerns

HHS allowed bipartisan Committee staff to see three letters from NIH to EcoHealth (May 18, 2016, July 7, 2016, and July 5, 2018) and one letter from EcoHealth to NIH (June 8, 2016) in an *in camera* review.[21] To our knowledge, NIH has not publicly disclosed these letters, although some of the contents in these letters appear to have been used in NIH correspondence to U.S. Senators.[22]

During the 2014 GOF moratorium in the United States, EcoHealth submitted its Year Two progress report dated May 13, 2016, to NIAID for grant R01AI110964. EcoHealth disclosed it would conduct experiments in humanized mice using two chimeric bat coronaviruses.[23] In response to the experiment descriptions in EcoHealth's research progress report, NIH wrote to EcoHealth on May 28, 2016,[24] to advise that NIAID determined the R01AI110964 grant research project may include GOF experiments subject to the 2014 GOF research pause.[25]

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[19] *Id.*
[20] *Id.*
[21] A bipartisan *in camera* private in-person inspection of the physical copies of four letters dated May 18, 2016, June 8, 2016, July 7, 2016, and July 5, 2018, was conducted at HHS headquarters on Oct. 5, 2021, monitored by HHS staff. Information presented as letter excerpts are produced from detailed staff notes because NIH refused to release copies of the letters to the Committee.
[22] See July 28, 2021, letter from NIH Director Francis Collins to U.S. Senator Charles Grassley, *available at* https://www.grassley.senate.gov/imo/media/doc/national_institutes_of_health_to_grassley_-_covid_origins_grant_oversight.pdf.
[23] Sharon Lerner and Mara Hvistendahl, *New Details Emerge About Coronavirus Research at Chinese Lab*, The Intercept (Sept. 6, 2021), *available at* https://theintercept.com/document/2021/09/08/understanding-the-risk-of-bat-coronavirus-emergence/.
[24] May 18, 2016, NIH letter to EcoHealth (per notes taken by Minority Committee staff Oct. 5, 2021 during bipartisan *in camera* review).
[25] On Oct. 17, 2014, the White House Office of Science and Technology Policy and the U.S. Department of Health and Human Services instituted a pause on funding research of Gain-of-Function (GOF) experiments involving influenza, SARS, and MERS viruses following multiple biosafety accidents at U.S. laboratories. The White House, *Doing Diligence to Assess the Risks and Benefits of Life Sciences Gain-of-Function Research*, Blog (Oct. 17, 2014), *available at* https://obamawhitehouse.archives.gov/blog/2014/10/17/doing-diligence-assess-risks-and-benefits-life-sciences-gain-function-researcH, and *available at* http://www.phe.gov/s3/dualuse/Documents/gain-of-function.pdf.

Under the signature of Dr. Peter Daszak, its president, chief scientist, and grant principal investigator, EcoHealth replied to NIH on June 8, 2016, asserting their research was not GOF.[26]

> These 2 chimeric bat-like CoVs were constructed on Sept. 24, 2015. They use the backbone of a group 2b SARS-like bat CoV WIV1 and the spike proteins of two newly discovered bat SL-CoVs (Rs7327 and RsSHC014). The construction of these chimeric viruses aims to understand the receptor usage and infectivity of bat SL-CoVs that may be progenitors of SARS-CoV. We have not yet tested the pathogenicity of these viruses in animals. [27]

There was no discussion of how the RsSHC014 differed from the SHC014 spike protein of concern in the 2015 Baric *et al* warning. If there was no difference between these viruses, then there was no assessment of a known risk. In addition to the potential threat of the RsSHC014 spike, the WIV1 backbone was already known to be potentially dangerous to humans.[28] Nevertheless, EcoHealth stated that its research would not be considered GOF because the virus it was using had never previously infected humans:

> We believe that this work would not be considered GOF because the pause specifically targeted experiments that related to the pathogenicity or transmissibility of SARS-CoV, MERS CoV and any influenza virus. Our molecular clone is WIV1, which is a group 2b SARS-like bat coronavirus that has never been demonstrated to infect humans or cause human disease.[29]

EcoHealth also argued that because the virus was ten percent different from the original SARS-CoV, their research did not qualify being subject to the GOF moratorium. EcoHealth continued its justification by explaining that because EcoHealth and/or the WIV would progressively introduce spike proteins that were progressively more distant from the original SARS-CoV, that the research was not subject to the GOF pause. EcoHealth also explained that its theory was supported by the 2015 publication of Dr. Ralph Baric's study:

> Moreover, we are introducing progressively more distant S glycoproteins into WIV1 (The RBD of Rs7327 differs from WIV1 in several amino acid residues while RsSHC014 is even more distantly related phylogenetically), so it seems progressively less likely that any of these viruses would be more pathogenic or transmissible than the SARS-CoV. This is further supported by the fact that

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[26] **June 8, 2016, EcoHealth letter to NIH (per notes taken by Minority Committee staff Oct. 5, 2021 during bipartisan *in camera* review).**

[27] ***Id.***

[28] Carolyn Korman, The Mysterious Case of the COVID-19 Lab Leak Theory, The New Yorker (October 12, 2021), *available at* https://www.newyorker.com/science/elements/the-mysterious-case-of-the-covid-19-lab-leak-theory. ("Shi's lab developed its own platform for creating chimeric viruses. She crossed another bat coronavirus from Yunnan—named WIV1—with clones of different novel spike proteins and tested the creation in humanized mice. The viruses quickly replicated. One made the mice emaciated, a sign of severe pathogenesis. **What made this work especially risky was that WIV1 was already known to be potentially dangerous to humans**. Baric himself had made this clear in a 2016 study titled 'SARS-Like WIV1-CoV Poised for Human Emergence.'") (Emphasis added).

[29] **June 8, 2016, EcoHealth letter to NIH (per notes taken by Minority Committee staff Oct. 5, 2021, during bipartisan *in camera* review).**

> Professor Ralph Baric's group (Menachery et al 2015, Nature Medicine 21, 1508-1513…PNAS, 113 (11): 3048-3053) took WIV1 spike and inserted it onto a SARS-CoV backbone and showed reduced pathogenicity in mice with human ACE-2 relative to SARS-CoV (mortality rates were much lower, therefore this is loss of function). This strongly suggests that the chimeric bat spike/bat backbone viruses should not have enhanced pathogenicity in animals. [30]

NIH Agreed with EcoHealth's Self-Assessment and Added Grant Conditions

In a July 7, 2016, response letter to EcoHealth, NIH replied that NIAID agreed with EcoHealth's determination that its work was not subject to the GOF pause based on its review of the original grant application, and cited two of the justifications provided by EcoHealth as the basis for its agreement:

> NIAID is in agreement that the work proposed under Aim 3 to generate MERS-like or SARS-like chimeric coronaviruses (CoVs) is not subject to the GOF research funding pause. This determination is based on the following: (1) the chimeras will contain only S glycoprotein genes from phylogenetically distant bat CoVs; and (2) recently published work demonstrating that similar chimeric viruses exhibited reduced pathogenicity. Therefore, it is not reasonably anticipated that these chimeric viruses will have enhanced pathogenicity and/or transmissibility in mammals via the respiratory route.[31]

> As a result, the NIAID added the following award condition, per the grant documents:

> NIAID acknowledges that if any of the MERS-like or SARS-like chimeras generated under this grant show **evidence of enhanced virus growth greater than 1 log over the parental backbone strain**, Dr. Daszak will immediately stop all experiments w/ these viruses and provide the NIAID Program Officer and Grants Management Specialist, and Wuhan Institute of Virology Institutional biosafety Committee, with the relevant data and information related to these unanticipated outcomes. (Emphasis added).[32]

In a revised grant award notice for Year Three, NIAID added the following in the special terms and conditions section:

> Per the letter dated July 7, 2016 to Mr. Aleksei Chmura at EcoHealth Alliance, should any of the MERS-like or SARS-like chimeras generated under this grant show **evidence of enhanced virus growth greater than 1 log over the parental backbone strain** you must stop all experiments with these viruses and provide the NIAID Program Officer and Grants Management Specialist, and Wuhan Institute

[30] *Id.*
[31] *Id.*
[32] *Id.*

> of Virology Institutional Biosafety Committee with the relevant data and information related to these unanticipated outcomes.[33] (Emphasis added).

Neither EcoHealth nor NIAID discussed alternative approaches that could have been less risky but may have been able to achieve the same research goals.

EcoHealth's Progress Report for Year Four Raises Question of Cover-up

EcoHealth submitted a Year Four progress report in September 2020, two years after when the report should have been submitted to receive Year Five funding.[34] The original EcoHealth's Year Four progress report that was presumably revised should have been submitted to NIH in spring 2018. However, this report was not included in the production to *The Intercept* or to us.

Sometime during Year Four of the grant (June 1, 2017-May 31, 2018), the humanized mice experiments with the chimeric viruses were carried out.[35] The Year Four progress report discussing these experiments are controversial because of the rarity of a progress report being submitted two years late. Given the strict NIH rules regarding the release of grant funds, it is believed that the Year Four progress report may have replaced an earlier version of the Year Four progress report.[36] It is highly unusual for a grantee to replace a progress report.

Contrary to Dr. Tabak's stated belief to bipartisan Committee staff during the June 28, 2021, briefing that all of EcoHealth's grant-supported research was published, and thus it was unlikely that EcoHealth would have much unpublished data, Minority Committee staff was unable to find any published studies for EcoHealth's humanized mice experiment discussed in the grant. The humanized mice experiment results EcoHealth reported to NIH, as described in the grant documents, showed that the SHC014S virus seriously infected the mice and caused them to lose 20 percent of their body weight in six days.[37] EcoHealth and the WIV infected humanized mice with the WIV1 parental virus and three chimeric viruses containing SHC014S, WIV16S and Rs4231S.[38] At two and four days post-infection, "viral loads in lung tissues of mice challenged with all three chimeras reached $>10^6$ genome copies per/g, significantly higher than related WIV1 infection (Fig. 6b). This demonstrates that pathogenicity of SARS-related coronaviruses in humanized mice differs with divergent S proteins, **confirming** the value of this model in assessing novel SARS related coronavirus pathogenicity."[39] (Emphasis added).

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[33] EcoHealth grant documents at 189, *available at* https://theintercept.com/document/2021/09/08/understanding-the-risk-of-bat-coronavirus-emergence/.
[34] Mara Hvistendahl and Sharon Lerner, *NIH Bat Coronavirus Grant Report Was Submitted More Than Two Years Late*, The Intercept, (Oct. 1, 2021), *available at* https://theintercept.com/2021/10/01/nih-bat-coronavirus-grant-ecohealth-alliance/.
[35] EcoHealth grant documents at 485-486 *available at* https://theintercept.com/document/2021/09/08/understanding-the-risk-of-bat-coronavirus-emergence/.
[36] Mara Hvistendahl and Sharon Lerner, *NIH Bat Coronavirus Grant Report Was Submitted More Than Two Years Late*, The Intercept, (Oct. 1, 2021), *available at* https://theintercept.com/2021/10/01/nih-bat-coronavirus-grant-ecohealth-alliance/.
[37] EcoHealth grant documents at 486, *available at* https://theintercept.com/document/2021/09/08/understanding-the-risk-of-bat-coronavirus-emergence/.
[38] *Id.*
[39] *Id.* The use of the word "confirming" suggests a previous belief that the experiment would demonstrate increased pathogenicity seen in the experiment's results rather than simply showing reduced pathogenicity, which was the purported justification that the experiment was not GOF.

NIH's Re-Review of EcoHealth Grant Found Research Was Not Subject to the P3CO Risk Analysis Framework Policy

Despite the documents NIH produced to us in which EcoHealth's Year Four progress report, dated September 16, 2020, more than two years after when it should have been submitted, NIH approved EcoHealth's Year Five grant renewal with a Notice of Award dated June 18, 2018.

Even though the proposed humanized mice experiment would have been already conducted during 2016 to 2017, NIH wrote on July 5, 2018, to EcoHealth reaffirming its July 7, 2016, determination that EcoHealth's proposed research was not a GOF experiment under the HHS P3CO framework. In its July 2018 letter, NIH did not cite any new or additional evidence to show the research was not subject to the HHS P3CO framework[40]

> The experiments to generate MERS-like or SARS-like chimeric coronaviruses, are not subject to the HHS P3CO framework. The terms and conditions of the award have been revised to indicate that should experiments proposed in this award result in a virus with enhanced growth by more than 1 log compared to wild type strains, you must notify your NIAID Program Officer, and Grants Management specialist immediate and that further research involving the resulting virus(es) may require review by the DHHS in accordance with the HHS PC30 Framework.[41]

In its November 5, 2018, progress report to NIH for the period of June 1, 2014 through May 31, 2019, EcoHealth reported that the strains of the viruses it was using in its experiments could represent a significant threat to public health because they could escape existing vaccine and therapeutic treatments.[42]

Preliminary Observations

Based on the totality of these studies and reports made available so far, we make the following preliminary observations:

- The revised 2017 HHS definition of GOF research appears to be too narrow because it does not capture SARS-like or MERS-like viruses that are very similar to SARS or MERS. On January 23, 2020, Dr. Christian Hassell, the Chair of the HHS P3CO review group, expressed concern about the narrow definition in the most recent meeting of NIH's National Science Advisory Board for Biosecurity (NSABB): "I'll just probably be more frank than may be appropriate - I think that's too narrow. My view on this thing is, don't

[40] July 5, 2018, NIH letter to EcoHealth (per notes taken by Minority Committee staff Oct. 5, 2021 during bipartisan *in camera* review).
[41] *Id.*
[42] EcoHealth grant documents at 486, *available at* https://theintercept.com/document/2021/09/08/understanding-the-risk-of-bat-coronavirus-emergence/.

use too fine a filter."[43] No additional meetings or communications have been taken in a year and nine months by NIH to address Dr. Hassell's concerns.[44]

- Both EcoHealth's and NIAID's assessments that the experiment would be expected to show less pathogenesis seem at odds with the stated goals of the research project to look for dangerous viruses with pandemic potential. The assessments also turned out to be wrong. Specifically, the humanized mice experiment with the SARS-like coronaviruses showed more pathogenesis with three of the viruses, especially the one labeled SHC014, which produced a 20 percent weight loss in the humanized mice.[45] As previously mentioned, Baric *et al* warned about viruses containing SHC014 in their 2015 publication.

- After the results of the 2015 Baric *et al* paper, which showed an increase in pathogenesis with some viruses, EcoHealth and NIAID should have examined the research proposal more closely before reaching the conclusion that the expected results of the experiment would be less pathogenic.

- It seems unlikely that EcoHealth and NIAID were unaware of the findings in the 2015 paper. Thus, we are left with the impression that both chose to document the research as less dangerous so that EcoHealth could continue to receive its funding and NIAID could avoid outside oversight of that research proposal.

- Neither the EcoHealth nor the NIAID assessments reflected the careful weighing of risks and benefits of the proposed potential GOF research.[46] In particular, NIAID's assessment in 2016 did not explain the benefits of the proposed research and how such benefits outweighed the risks, nor did NIAID consider any biosafety and risk mitigation measures. The NIAID determination in 2018 that the research was not subject to the HHS P3CO framework lacked any analysis or explanation supporting its determination and failed to address how it concluded that there was no pandemic potential.

- Based on the available documents, EcoHealth violated the terms of its grant. The chimeric virus used in the humanized mice experiment produced more than one log of virus growth compared to the WIV1 parental backbone.[47] In fact, it appears the experiment with the virus listed as SHC014 produced more than 3 logs of comparative growth. Per their grant terms, EcoHealth was to stop their experiment and notify NIAID.[48] It does not appear it

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[43] David Willman and Madison Muller, *A Science in the Shadows*, The Washington Post (Aug. 26, 2021), *available at* https://www.washingtonpost.com/nation/interactive/2021/a-science-in-the-shadows/.

[44] Confirmed with Dr. Hassell on August 13, 2021 in a bipartisan Committee staff briefing.

[45] Sharon Lerner and Mara Hvistendahl, *New Details Emerge About Coronavirus Research at Chinese Lab*, The Intercept (Sept. 6, 2021), *available at* https://theintercept.com/document/2021/09/08/understanding-the-risk-of-bat-coronavirus-emergence/.

[46] June 8, 2016 EcoHealth letter to NIH (per notes taken by Minority Committee staff Oct. 5, 2021 during bipartisan *in camera* review); July 7, 2016 NIH letter to EcoHealth (per notes taken by Minority Committee staff Oct. 5, 2021 during bipartisan *in camera* review).

[47] *See* Andrew Kerr, *Fauci-Funded Wuhan Lab Viruses Exhibited Over 10,000 Times Higher Viral Load Than Natural Strain*, Daily Caller (September 9, 2021), *available at* https://dailycaller.com/2021/09/09/ecohealth-alliance-gain-of-function-higher-viral-load-anthony-fauci/.

[48] There is no evidence that EcoHealth stopped the experiment to notify NIAID as required. In discussing the results of this experiment, EcoHealth never explicitly stated in the text of the progress reports the amount of virus growth of the parental backbone, thereby masking the comparison that might have attracted attention from a NIAID reviewer. However, the bar graph in the grant documents shows that the parental backbone, WIV 1, produced about 4.7 log10 genome copies per gram, two days after

did either. As a result, NIAID's oversight of the grant failed to detect the viral growth issue and, notably, did not hold EcoHealth accountable for violating the terms of its grant.

NIH Funded the EcoHealth Grant After Suspending It

Since April 2020, NIH has suspended all activities for NIAID grant R01AI110964 due to EcoHealth's grant award non-compliance.[49] Among other infractions, NIH advised EcoHealth in a July 8, 2020, letter that EcoHealth had not satisfied its obligations to monitor the WIV's activities and had not reported its subawards as required. The grant activities remain suspended and, as a result of such suspension, NIH made clear in its letter that "no funds from grant R01AI110964 may be provided to or expended by EcoHealth Alliance" until EcoHealth provides information and materials to NIH's satisfaction.[50]

On July 13, 2020, NIH issued a revised award approval notice to EcoHealth for the sixth year of the suspended project, despite NIH's suspension of all grant activities.[51] Not only did NIH approve the award, but based on a letter from EcoHealth, NIH apparently increased the award amount by an additional $369,819. Despite NIH's notification to EcoHealth on July 8, 2020, that no funds would be provided, NIH issued the payment of that increase to EcoHealth on July 13, 2020, even though EcoHealth was not allowed to conduct activities under this grant during the suspension. In its revised award notice to EcoHealth issued on the same date as the $369,819 payment, NIH designated specific allocations of $76,301 for the WIV, and $75,600 for the Institute of Pathogen Biology in Beijing, China.[52]

This raises significant concerns regarding NIH's oversight of grantees. This also raises concerns that NIH funding of a suspended entity is contrary to the Public Health Service Act and is possibly an Anti-Deficiency Act violation.[53] At a minimum, this expenditure is inconsistent with competent stewardship of federal funds, and subverts compliance with the NIH suspension letter and the NIH Grant Policy, which states: "Organizations or individuals that are suspended… cannot receive NIH grants, be paid from NIH grant funds, whether under a primary or lower-tier transaction (including trainees on NIH-supported training grants), or otherwise participate during the period of suspension…."[54]

On June 10, 2021, we wrote to you about our concerns that NIH issued a new $2 million award to EcoHealth in August 2020, while EcoHealth was a noncompliant grantee with a

infection compared to about 8 log10 genome copies per gram produced by the SHC014 strain - more than three logs of growth, much more than one log threshold specified in the grant terms.

[49] Committee staff have confirmed the grant status on multiple occasions with NIH leadership.

[50] NIH terminated the grant on April 24, 2020. On July 8, 2020, NIH simultaneously reinstated and suspended the grant activities, pending EcoHealth's cooperation and compliance. Katherine Eban, *The Lab Leak Theory: Inside the Fight to Uncover COVID 19's origins,* Vanity Fair (June 3, 2021), *available at* https://www.vanityfair.com/news/2021/06/the-lab-leak-theory-inside-the-fight-to-uncover-covid-19s-origins.

[51] 2R01AI110964-06 is the renewal number assigned to the sixth year of the NIH R01AI110964 grant project.

[52] EcoHealth grant documents at 321, *available at* https://theintercept.com/document/2021/09/08/understanding-the-risk-of-bat-coronavirus-emergence/.

[53] 31 U.S.C. 1341.

[54] National Institutes of Health, *Debarment and Suspension*, NIH Grants Policy Statement (Oct. 1, 2020), *available at* https://grants.nih.gov/grants/policy/nihgps/html5/section_4/4.1.6_debarment_and_suspension.htm.

suspended NIH grant.[55] In the same letter, we also detailed our concerns that EcoHealth had never met its requirements to report publicly its subawards to the WIV or to the Wuhan University School of Public Health until NIH specifically instructed them to do so during communications between April and July 2020. The effect of EcoHealth withholding its financial reporting is that prior to and at the time of the COVID-19 pandemic outbreak, the financial relationship between EcoHealth, NIH, and the WIV was hidden from the public and not included in USASpending.gov.

After paying an illegible grant recipient in July 2020, the NIH in August 2020 announced its award of two multimillion-dollar grants to EcoHealth for NIAID's $3.05 million project number U01AI151797, and NIAID's $1.2 million project number U01AI153420.[56] Based on available information, NIH has not recovered the $369,819 payment to EcoHealth. As recently as July 2021, NIH approved a $574,984 payment to EcoHealth.[57] Furthermore, over $23.4 million has been paid to EcoHealth in its status as a potentially ineligible grant recipient, by NIH, USAID, and DoD since the time NIH should have reported its administrative suspension to www.SAM.gov.[58]

In light of our concerns about NIH's grant management and oversight, please respond to the following by November 10, 2021:

1. Does NIH plan to stop funding EcoHealth until it is compliant with NIH's requests? If yes, please identify when you will notify EcoHealth. If not, why not?

2. Does NIH plan to recover the money paid to EcoHealth on its suspended grant? If yes, please identify when you will notify EcoHealth. If not, why not?

3. Please identify who authorized the $369,819 funding issued to EcoHealth on July 13, 2020, and the specific authority for this funding.

4. Does NIH intend to enter the EcoHealth suspension into the www.SAM.gov database that is intended for agency reporting of temporary or permanent suspensions? If yes, when? If no, why not?

5. Please provide all funded and denied grant applications, progress and final reports for all NIH grants awarded to EcoHealth Alliance as a prime or subgrant recipient in unredacted form.

6. Please provide the following documents related to grant award R01AI110964:

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[55] U.S. House of Representatives Energy and Commerce Committee Republicans, Letter to NIH, Spotlight on COVID-19 Origin Investigation, (June 10, 2021), *available at* https://republicans-energycommerce.house.gov/wp-content/uploads/2021/06/06.10.21-Letter-to-NIH-Director-Collins.pdf.

[56] National Institutes of Health, *NIH establishes Center for Research in Emerging Infectious Diseases*, News Releases (Aug. 27, 2020), *available at* https://www.nih.gov/news-events/news-releases/nih-establishes-centers-research-emerging-infectious-diseases.

[57] USA Spending.gov, *EcoHealth Alliance*, Advanced Recipient Search (Oct. 13, 2021) *available at* https://www.usaspending.gov/award/ASST_NON_U01AI153420_7529.

[58] U.S. House of Representatives Energy and Commerce Committee Republicans, Letter to NIH, Spotlight on COVID-19 Origin Investigation, (June 10, 2021), *available at* https://republicans-energycommerce.house.gov/wp-content/uploads/2021/06/06.10.21-Letter-to-NIH-Director-Collins.pdf.

a. all documents that were not provided to *The Intercept*, including the letter from EcoHealth on which NIH based its decision to increase the award,
b. EcoHealth's original application, and
c. all other original documents for which only the revised versions were produced.

7. Please provide all correspondence between EcoHealth and NIH, including any letter exchanges about NIH's identification of EcoHealth research that potentially included GOF experiments and EcoHealth's response, dated in May, June, and July of 2016 and July 2018. Please also provide all correspondence between EcoHealth and NIH, including any letter exchanges about humanized mice experiments conducted during Year Five of the grant. Please also include another missing letter from EcoHealth to NIH that was used as the basis to increase the award amount by $369,819.

8. Please provide an accounting of all EcoHealth subawards, including contracts or any other agreements, to all organizations and scientists located in or sponsored by China from the year 2000 to the present.

9. Please facilitate access for Committee staff and the undersigned to EcoHealth's genomic sequence data and/or database of unpublished and published sequences.

10. Please provide all documentation regarding NIH's resource coordination with USAID, EcoHealth, DoD, and any other communications in which NIH took steps to ensure no overlap of U.S. Government agency funds for the same research was occurring.

11. Please provide EcoHealth's original Year Four progress report for the period of June 1, 2017 to May 31, 2018, that would have been submitted in 2018.

12. Please provide the list of all NIH personnel involved in the development of the HHS P3CO framework with an explanation of each individual's role.

13. What would be the purpose of conducting humanized mice experiments other than to test whether a virus could infect human cells?

14. Please make appropriate NIAID personnel available to Committee staff to address questions about the handling of the EcoHealth grant.

15. When did NIAID first learn that EcoHealth had conducted the humanized mice experiment proposed in 2016?

16. Why did NIAID conduct an HHS P3CO review of the EcoHealth research proposal if the experiment was already conducted?

17. Why were less risky alternative approaches to EcoHealth's proposed experiment not considered and discussed?

18. Please explain why NIAID concluded that the EcoHealth grant was not subject to the HHS P3CO framework.

If you have any questions, please contact Alan Slobodin or Diane Cutler of the Minority Committee staff.

Sincerely,

Cathy McMorris Rodgers
Republican Leader
Committee on Energy and Commerce

Brett Guthrie
Republican Leader
Subcommittee on Health

H. Morgan Griffith
Republican Leader
Subcommittee on Oversight and Investigations

cc: The Honorable Frank Pallone, Chairman
The Honorable Anna Eshoo, Chair, Subcommittee on Health
The Honorable Diana DeGette, Chair, Subcommittee on Oversight and Investigations
Ms. Christi Grimm, Principal Deputy Inspector General, U.S. Department of Health and Human Services

EXHIBIT 29

FRANK PALLONE, JR., NEW JERSEY
CHAIRMAN

CATHY McMORRIS RODGERS, WASHINGTON
RANKING MEMBER

ONE HUNDRED SEVENTEENTH CONGRESS

Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115
Majority (202) 225-2927
Minority (202) 225-3641

February 14, 2022

Dr. Francis Collins
National Human Genome Research Institute
National Institutes of Health
31 Center Drive MSC 2152
9000 Rockville Pike
Bethesda, MD 20892-2152

Dr. Collins,

Recently disclosed emails revealed that in January 2020, virology experts told you and Dr. Anthony Fauci that they believed COVID-19 had lab-made features and that the virus may have escaped from a lab.[1] However, those same email communications, particularly when viewed in light of other publicly available information, demonstrate an apparent effort by you and Dr. Fauci not only to cover-up the concerns those virologists raised, but to suppress scientific debate about the origins of COVID-19. It appears you and Dr. Fauci may have done so to protect China and avoid criticism about incredibly risky research that the National Institute of Allergy and Infectious Diseases (NIAID) was funding at the Wuhan lab.

According to emails released by House Oversight and Reform Republicans, there was significant concern among virology experts that COVID-19 may have originated from a lab.[2] One scientist told you he was "bothered by the furin site" and had a "hard time explain[ing] that as an event outside the lab," which led him to opine it was "70:30" that the virus came from a lab; another scientist told you he "can't think of a plausible natural scenario"; a different scientist claimed that "some of the features (potentially) look engineered"; and yet another said the "furin cleavage site" struck him as unusual as it related to natural evolution and that "if evolutionary origins…were to be discussed…only people with sufficient information or access to samples to address it would be the teams working in Wuhan."[3]

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[1] Correspondence posted by House Oversight and Government Reform Republicans (Jan. 11, 2022) *available at* https://republicans-oversight.house.gov/wp-content/uploads/2022/01/Letter-Re.-Feb-1-Emails-011122.pdf
[2] *Id.*
[3] *Id.*

Rather than allow for scientific review and robust debate, communications in these emails show that you and Dr. Fauci appeared more concerned about protecting certain relationships and institutional interests in collaborations in China. In fact, the NIAID has had a full-time official, Dr. Ping Chen, stationed at the U.S. Embassy in Beijing for several years to oversee and promote NIAID's interests in China and the emails show that your immediate concern was how discussion of the lab leak theory would do "great potential harm to science and international harmony." Specifically, you were responding to an email chain that included this statement from Dr. Ron Fouchier: "However, further debate about such accusations would unnecessarily distract top researchers from their active duties and do unnecessary harm to science in general and science in China in particular." You even went a step further and asked how NIH could work to "help put down this very destructive conspiracy." In contrast, there is no evidence from the available emails nor has NIH provided any information to us that indicates Dr. Fauci or you took action to investigate further the possible lab origins of the pandemic.

Instead of alerting national security experts to the potential threat that scientists were questioning the origin of the SARS2 virus, you shut down debate about the COVID-19 origin.[4] We are deeply concerned about your decision to suppress highly relevant information when you received the early alert that the SARS2 virus could be a potential threat. As the then Director of the NIH that includes NIAID's multibillion dollar biodefense program and the NIAID as an advocate for global sampling and surveillance to detect *potential* pandemics, when the alert was in your hands, you remained silent and worse, propagated a counter narrative that may have hurt our government's response in the early days of the pandemic.

We oversee public health and are seeking the truth about how this pandemic started so we can better prepare and hopefully prevent future pandemics. We have significant concerns that your conduct, which appears to have been designed to protect China and, in furtherance of that, to suppress certain scientific information, occurred at a time when it was critical for government leaders and decisionmakers to be aware of all relevant information and may have hurt our COVID-19 response.

Accordingly, in light of these concerns, please provide written responses to the following questions by February 28, 2022:

1. Regarding your January 2020 communications with the virology experts referenced above:

    a. How were the communications with the virology experts initiated?

        i. Did you initiate the communications with the virology experts or did they?

        ii. When were these communications initiated? Please identify all parties to these communications and the specific subject matters addressed in these communications.

[4] *Id.*

b. What was the purpose for your communications with these virology experts?

c. Please identify additional individuals you consulted with about the origins of COVID-19 in January and February 2020.

d. How did you select the virology experts to contact?

e. When did your communications with these virology experts about the origins of COVID-19 end and why?

2. Did you brief anyone at the White House, the U.S. Department of Health and Human Services (HHS), or anyone else involved in the COVID-19 response about the communications with the virology experts?

   a. If you did, please identify who you notified, when you notified them, and what information you provided to them.

   b. If you did not, why did you withhold such relevant information?

3. To what extent did preserving international harmony (especially with China) affect your advice to the White House, HHS, or anyone else involved in the COVID-19 response?

4. What is the purpose of having an NIAID official posted at the U.S. embassy in China?

5. Please identify any NIAID collaborations in China from January 1 to June 30, 2020.

6. During January 2020, were you in contact with Chinese scientists about SARS CoV-2?

   a. If so, how have these contacts influenced you in the performance of your COVID-19 response duties?

7. Prior to the January 31, 2020, email, did you know about the pangolin coronavirus sequence with a receptor binding domain (RBD) similar to the one in SARS CoV-2?

8. Did the publication of pangolin virus RBD impact your assessment on the origins of the COVID-19 pandemic? If so, why?

9. Did the publication on February 3, 2020, of the RaTG-13 bat coronavirus sequence that was 96 percent similar to SARS CoV-2 impact your assessment on the origins of COVID-19 pandemic? If so, why?

10. Were you involved with the February 4, 2020, emergency meeting at the National Academies of Science, Engineering, and Medicine (NASEM) convened at the request of the White House?

    a. If so, did you attend, what was your role, and what was discussed?

    b. Did the NASEM emergency meeting influence your assessment of the origins of COVID-19?

    c. Did you and/or the virology experts discuss the NASEM emergency meeting in the communications?

11. Did you edit, make suggestions, or influence in any way the publication of the proximal origin paper?

12. In a February 2, 2022, letter to HHS Secretary Xavier Becerra and NIH Acting Director Lawrence Tabak, the House Committee on Oversight and Reform Republicans noted that NIH forced an NIH advisor to shred notes and other documents pertaining to the Wuhan Institute of Virology (WIV) grants as early as 2014. That committee pointed to a November 5, 2021, email from a redacted source, which stated:

> I signed a confidentiality agreement in which I agreed not to discuss any grant with anyone except with other members of the study section, and - once the meeting was over - that I would destroy any notes that I had taken during the meeting (we did this by tossing them in shred box in the meeting room).

This email suggests that this redacted source served on a peer review panel for the NIAID, and that the practice of shredding documents was not limited to grants related to EcoHealth Alliance or the WIV. It may have been systemic.

What are NIAID's document retention rules for peer review panels scoring grant proposals? Please provide the legal justification for any document shredding practices at NIAID, and specifically NIAID peer review panels.

Sincerely,

Cathy McMorris Rodgers
Ranking Member
Committee on Energy and Commerce

Brett Guthrie
Ranking Member
Subcommittee on Health

H. Morgan Griffith
Ranking Member
Subcommittee on Oversight and
Investigations

EXHIBIT 30

EXHIBIT 30

FRANK PALLONE, JR., NEW JERSEY
CHAIRMAN

CATHY McMORRIS RODGERS, WASHINGTON
RANKING MEMBER

ONE HUNDRED SEVENTEENTH CONGRESS

Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115
Majority (202) 225-2927
Minority (202) 225-3641

February 24, 2022

Lawrence A. Tabak, D.D.S., PhD.
Acting Director
National Institutes of Health
9000 Rockville Pike
Bethesda, MD 20892

Dr. Tabak,

We write to continue our oversight of National Institutes of Health (NIH) grant awards to EcoHealth Alliance (EcoHealth). On January 6, 2022, the NIH sent two letters to EcoHealth related to its failure to comply with terms agreed upon for its NIH grants.[1] While we appreciate the NIH's current enforcement efforts to obtain EcoHealth's compliance, new information from recently disclosed information included in the recent NIH letters raises troubling concerns about EcoHealth's conduct upon which the NIH is either overlooking or taking insufficient action. Those concerns include withheld data and possible double billing, missing laboratory notebooks and electronic files related to humanized mice research at the Wuhan lab, and EcoHealth's private donations that may not have been reported to NIH. These concerns raise the prospect of possible fraud that require the NIH's heightened attention.

Withheld Data and Potential Double Billing

In June 2014 and during the gain-of-function research pause in the United States, NIH awarded grant R01AI110964 to EcoHealth for bat coronavirus research. EcoHealth then entered into a subaward agreement with scientists at the Wuhan Institute of Virology (WIV) for research assistance. During that time, EcoHealth also received awards from other U.S. agencies, including as a subgrant recipient from the U.S. Agency for International Development (USAID) to support scientific collaboration at the WIV.[2]

[1] Letters to EcoHealth Alliance (Jan. 11, 2022) *available at* https://republicans-oversight.house.gov/wp-content/uploads/2022/01/January-2022-EHA-SAC-CAP-letter-final1.pdf.
[2] Energy and Commerce Republicans, Letter to USAID (June 28, 2021) *available at* https://republicans-energycommerce.house.gov/wp-content/uploads/2021/06/2021.06.22-USAID-Origins-Letter.pdf.

Through its USAID project work, EcoHealth catalogued human and bat genomic sequence findings into a database used to create predictive maps of potential disease outbreaks and reported finding a high number of SARS-like coronaviruses in bats sampled in China.[3] EcoHealth identified several novel bat coronaviruses.[4] USAID also supported sampling by EcoHealth and its collaborative partners of more than 7,300 humans and animals in China.[5] The human specimens were obtained from individuals with symptoms of an infectious disease meeting criteria that the most-likely cause had been ruled out through laboratory tests and supporting data was available.[6]

Research accomplishments in USAID PREDICT reports very closely resemble those reported by EcoHealth to NIH in its progress reports. The similarities are striking and include similar charts, graphics, sampling locations, and research discoveries. For example, virus detection was described in the USAID-China PREDICT report as, "Working in collaboration with NIAID-funded partners, we demonstrated that some of the newly discovered bat-CoVs were able to bind to human cells, infect them in vitro, and cause SARS-like disease in a lab animal model."[7] This is a research accomplishment EcoHealth also reported in its NIH progress reports.[8] EcoHealth reported having access to tens of thousands of wildlife samples as a result of its NIH project and from a large multi-year contract from USAID for the PREDICT project.[9]

Recently published email documents show that Dr. Daszak worked to ensure that the USAID-catalogued sequences were not attributed to the USAID work in GenBank, the NIH genetic sequence database of all publicly available DNA sequences.[10] In emails acquired by U.S. Right to Know, an EcoHealth USAID collaborator at Metabiota advised an EcoHealth staff member on April 20, 2020, that virus sequences detected in China as part of the USAID project were submitted to GenBank and scheduled for release in 10 days.[11] The EcoHealth staff member replied to delay uploading the sequences because **some** of the sequences were ready for

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[3] USAID, *PREDICT-Advancing Global Health Security at the Frontiers of Disease Emergence*, (June 5, 2021) *available at* https://ohi.vetmed.ucdavis.edu/sites/g/files/dgvnsk5251/files/inline-files/PREDICT%20LEGACY%20-%20FINAL%20FOR%20WEB%20-compressed_0.pdf.

[4] Kirsten V.K. Gilardi, Jonna A.K. Mazet, *The United States Agency for International Development Emerging Pandemic Threat PREDICT Project – Global Detection of Emerging Wildlife Viral Zooneses*, Fowler's Zoo and Wild Animal Medicine Current Therapy, Volume 9, Pages 110-116 (Sep. 28, 2018) *available at* https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7152072/.

[5] USAID, *PREDICT-Advancing Global Health Security at the Frontiers of Disease Emergence*, (June 5, 2021) *available at* https://ohi.vetmed.ucdavis.edu/sites/g/files/dgvnsk5251/files/inline-files/PREDICT%20LEGACY%20-%20FINAL%20FOR%20WEB%20-compressed_0.pdf.

[6] *Id.*

[7] USAID Predict China, One Health in Action (2009-2020) *available at* https://static1.squarespace.com/static/5c7d60a711f7845f734d4a73/t/5f5fe4e59eeb3f245097cbae/1600120064528/FINAL+REPORT+COUNTRY-CHINA-FULL.pdf.

[8] EcoHealth grant documents *available at* https://theintercept.com/document/2021/09/08/understanding-the-risk-ofbat-coronavirus-emergence/.

[9] *Id.*

[10] U.S. Right to Know, EcoHealth Alliance wanted to block disclosure of Covid-19 relevant virus data from China (Jan. 10, 2022) *available at* https://usrtk.org/biohazards-blog/ecohealth-alliance-wanted-to-block-disclosure-of-covid-19-relevant-virus-data-from-china/.

[11] *Id.*

publication and time was needed to check the data, and also because the China institution must approve publication.[12]

Dr. Daszak then wrote, "All - It's extremely important that we don't have these sequences as part of our PREDICT release to Genbank at this point. As you may have heard, these were part of a grant just terminated by NIH…Having them as part of PREDICT will being [sic] very unwelcome attention to UC Davis, PREDICT and USAID."[13] Dr. Daszak's response raises questions about project funding he received from NIH and USAID for his work in China and the potential that both agencies were funding the same research. Suspicions of potential duplication of funding are further raised by the collaborator and staff logging the sequences as belonging to the USAID project.

On January 10, 2022, Dr. Daszak tweeted that sequences were discovered under NIH funding and that all SARSr-CoVs were uploaded into GenBank then publicized in the *Nature Communications* article referenced earlier that also identified EcoHealth's private and anonymous funding sources.[14] Dr. Daszak wrote, "**All** sequences of SARS-related coronaviruses discovered by EcoHealth Alliance in China were sequenced using NIH funding and have been made public in peer-reviewed scientific papers and via the publicly available Genbank database. The Genbank accession numbers for over 600 sequences can be found in the attached paper." [Emphasis added].[15] Dr. Daszak's tweet representing that "all sequences…have been made public" contradicts the EcoHealth employee's email stating that only some of the USAID-funded sequences from China would be published. We question if Dr. Daszak reported those sequences in the sequence data he reported as an accomplishment under USAID funding. It is imperative for NIH to make available all genomic sequencing data from Dr. Daszak and EcoHealth and compare EcoHealth documentation submitted to USAID.

Questions of grant coordination with another federal agency are also raised. In March 2018, EcoHealth submitted a bat coronavirus research proposal to Defense Advanced Research Projects Agency (DARPA), entitled "Project DEFUSE: Defusing the Threat of Bat-borne Coronaviruses." The proposal included detailed plans to fund research that, among other risky experiment techniques, would insert a furin cleavage site into a bat coronavirus genetic sequence. The SARS-CoV-2 virus is a betacoronavirus that features a furin cleavage site in the spike protein, a characteristic that has never previously been detected in this family of coronaviruses. The function of the furin cleavage site in SARS-CoV-2 is significant because it is the essential mechanism for the virus entry into human lungs. DARPA ultimately rejected the proposal later in 2018.

However, in its Year Four NIH progress report submitted in April 2018, covering activities between June 2017 and May 2018, EcoHealth reported that Peter Daszak and WIV co-investigator Zhengli Shi introduced this project and discussed new opportunities about predicting and preventing zoonoses with NIAID and the Defense Advanced Research Projects Agency

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[12] *Id.*
[13] *Id.*
[14] Daszak, Peter@PaterDaszak Twitter, Jan 10, 2022 9:52 pm *available at* https://twitter.com/PeterDaszak/status/1480734382558224388?s=20.
[15] *Id.*

(DARPA), the National Academies of Science, Engineering and Medicine Forum on Microbial Threats and with organizations in China.[16] The reference to DARPA in the Year Four progress report suggests that EcoHealth saw linkage between the DARPA proposal and its NIAID research grant. It is unclear whether the rejected DARPA proposal was funded elsewhere, and to what extent this proposal or any other ideas EcoHealth discussed with DARPA informed any EcoHealth communications with NIAID and/or any research activity funded by NIAID.

Missing Laboratory Notebooks and Electronic Files

In a January 6, 2022, letter to EcoHealth, the NIH reiterated its request for the laboratory notebooks and electronic files that led to the generation of bar figures and accompanying texts portraying weight loss and death in humanized mice experiments.[17] The NIH letter confirmed that EcoHealth reported to NIH that notebooks or files created and retained by the sub-grantee, WIV, were not in EcoHealth's possession.[18] EcoHealth claimed it had forwarded the NIH's request for those records to the WIV.[19] Given the Chinese government's lack of cooperation with global public health requests and its known punishment of Chinese scientific institutions and scientists for cooperating with others outside China, there is little reason to believe that the WIV will actually provide these notebooks and files. EcoHealth's inability to substantiate these research experiments calls into question the validity of the entire research effort with the WIV, in addition to violating the terms of its NIH agreement. Because EcoHealth has received over $16.8 million from NIH since 2005[20] and Dr. Daszak has worked as an NIH peer reviewer, the NIH grant requirements were well known to them, so the deliberateness of their noncompliance should be questioned.

Further, EcoHealth's admission that it did not have copies of the notebooks or the files raises new troubling issues that need to be resolved by the NIH.[21] Since EcoHealth did not have notebooks or the files, the NIH needs to find out how EcoHealth was able to certify the validity of all figures and texts of the humanized mice experiment results reported in progress reports for Year Four and Year Five.[22] The NIH needs to protect the integrity of the NIH grant oversight program and sponsored research. Since EcoHealth claims the WIV created and retained these records, presumably EcoHealth received documentation from the WIV to complete its progress reports.[23] To dispel the notion of research cover-ups or fabrication and to prove how EcoHealth

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[16] EcoHealth grant documents at page 273 *available at* https://theintercept.com/document/2021/09/08/understanding-the-risk-ofbat-coronavirus-emergence/.
[17] Letters to EcoHealth Alliance (Jan. 11, 2022) *available at* https://republicans-oversight.house.gov/wp-content/uploads/2022/01/January-2022-EHA-SAC-CAP-letter-final1.pdf.
[18] *Id.*
[19] *Id.*
[20] NIH Reporter, Query results for *EcoHealth Alliance* (Jan. 13, 2022) *available at* https://reporter.nih.gov/search/z_bHgzk69kCqeyiCfy-7fA/projects.
[21] Letters to EcoHealth Alliance (Jan. 11, 2022) *available at* https://republicans-oversight.house.gov/wp-content/uploads/2022/01/January-2022-EHA-SAC-CAP-letter-final1.pdf.
[22] EcoHealth grant documents *available at* https://theintercept.com/document/2021/09/08/understanding-the-risk-ofbat-coronavirus-emergence/.
EcoHealth grant documents *available at* https://s3.documentcloud.org/documents/21089573/priority-grants-for-foia-request-55058-first-look-institute-2_redacted.pdf.
[23] Letters to EcoHealth Alliance (Jan. 11, 2022) *available at* https://republicans-oversight.house.gov/wp-content/uploads/2022/01/January-2022-EHA-SAC-CAP-letter-final1.pdf.

prepared its certified progress reports, NIH should request that EcoHealth produce all documentation relied upon to validate its progress reports.

Finally, it is highly suspicious that EcoHealth and the WIV reported results from a single risky experiment conducted in one year into two separate progress reports for two different years. The research involved bat coronaviruses and humanized mice. During the Year Four reporting period between June 2017 and May 2018, EcoHealth conducted one experiment that caused some ACE2 Receptor humanized mice to get sick within six days after infection and die within two weeks of infection. However, EcoHealth reported the sick mice in its Year Four report (the first six days) and saved the lethal results (the full two weeks) to report in Year Five, in a delayed submission that was not received by the NIH until August 2021. The Year Five report covered experiments between June 2018 through May 2019.[24] The reporting of the humanized mice fatalities to NIH was delayed for three years.[25] Bifurcating the reporting of experiment results raises the question of whether EcoHealth and the WIV were covering up the deadly pathogenic results of risky research by concealing the mice deaths for an extended period of time (especially during the time of the grant renewal in mid-2019).

Further, EcoHealth represented in its Year Five report that the experiments were conducted between June 2018 and May 2019, evidenced by the statement, "In Year 5, **we continued** with *in vivo* infection experiments of diverse bat SARS-CoVs on transgenic mice expressing human ACE2."[26] [Emphasis added]. EcoHealth's questionable representation of the experiment dates raises questions about whether the humanized mice experiment results were stretched out into another year's progress report to provide filler in the report and divert NIH's attention away from the possibility of undisclosed research conducted in Year Five (2019). Questions about the possibility of undisclosed Year Five research are heightened because laboratory analysis was the only project activity EcoHealth planned during its final year of the five-year grant award. In the grant research strategy timeline and management plan section, EcoHealth reported that the duration of its lab data analysis and modeling activities would span the final four years of the project and conclude at the end of the award. No other research activities were planned during the final project year.[27]

Other discrepancies in EcoHealth's Year Five progress report heightens concerns arising from the missing substantiation of research. A close examination of the Year Five progress report dated August 3, 2021, covering the June 1, 2018 to May 30, 2019, project period shows that the chart examples are not in sequential order.[28] The report contains two different charts that

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[24] Ecohealth Oct. 26, 2021 letter to NIH *available at* https://www.documentcloud.org/documents/21097880-ecohealth-letter-contesting-claims.
[25] EcoHealth grant documents *available at* https://theintercept.com/document/2021/09/08/understanding-the-risk-ofbat-coronavirus-emergence/.
[26] *Id.*. The wording suggests that EcoHealth was continuing to conduct experiments, instead of organizing follow-up analysis of an experiment already conducted in the previous award year.
[27] EcoHealth grant documents at page 126 posted by *The Intercept* (Sept. 8, 2021) *available at* https://theintercept.com/document/2021/09/08/understanding-the-risk-ofbat-coronavirus-emergence/.
[28] EcoHealth grant documents posted by *The Intercept* (Oct. 21, 2021) *available at* https://theintercept.com/document/2021/09/08/understanding-the-risk-ofbat-coronavirus-emergence/.

are both labeled *Figure 2*, one on page 6 and the other on page 9.[29] The Figure 2 on page six is also missing letters from some sampling site locations. For example, spaces are evident where the letter "I" should be in Jinning, Yunnan and instead reads, "J nn ng, Yunnan."[30] On Year Five report page 11, the chart examples skip from from *Figure 4* directly to *Figure 8*.[31] Another example from the Year Five report is how *Figure 13* is followed by *Figure 7*. The contents of some of the figures do not match what is described in the text. For example, the text states *Figure 7* shows rates of evolutionary transitions among alphacoronavirus families during evolution, but the actual figure shows immunofluorescence measurements for MERS-like CoVs.[32] There are other similar inconsistences between the figure numbers and what the text says and what the figures show. For example, there are also two different graphics that are labeled "Figure 1."[33]

Finally, there are inconsistencies in EcoHealth's explanation surrounding the delayed submission of the Year Five progress report to the NIH. In his letter to the NIH of October 26, 2021, EcoHealth president Peter Daszak wrote that he did not submit the Year Five progress report because he was locked out of the system "starting" on July 24, 2019.[34] However, documents released under FOIA show Peter Daszak sent an email to the NIH that said he "is" now able to submit the Year Five progress report on July 24, 2019, and is about to do so.[35]

Private Funding

With respect to private funding, documents show that EcoHealth has been receiving private donations that may not have been disclosed to the NIH.[36] On August 25, 2020, Nature Communications published *Origin and cross-species transmission of bat coronaviruses in China,* authored by EcoHealth president Peter Daszak and others.[37] Research funding sources are acknowledged as: award number R01AI110964 from the NIH National Institute of Allergy and Infectious Diseases (NIAID); cooperative agreement number GHN-A-OO-09-00010-00

[29] EcoHealth grant documents, page 6 and page 9, posted by *The Intercept* Oct. 21, 2021) *available at* https://www.documentcloud.org/documents/21089573-priority-grants-for-foia-request-55058-first-look-institute-2_redacted.
[30] *Id.*
[31] EcoHealth grant documents, page 11, posted by *The Intercept* (Oct. 21, 2021) *available at* https://www.documentcloud.org/documents/21089573-priority-grants-for-foia-request-55058-first-look-institute-2_redacted.
[32] EcoHealth grant documents, page 17, posted by *The Intercept* (Oct. 21, 2021) *available at* https://www.documentcloud.org/documents/21089573-priority-grants-for-foia-request-55058-first-look-institute-2_redacted.
[33] EcoHealth grant documents, posted by *The Intercept* (Oct. 21, 2021) *available at* https://www.documentcloud.org/documents/21089573-priority-grants-for-foia-request-55058-first-look-institute-2_redacted.
[34] EcoHealth letter posted by The Intercept (Nov. 3, 2021) *available at* https://www.documentcloud.org/documents/21097880-ecohealth-letter-contesting-claims.
[35] Emails posted by White Coat Waste Project at 302, Andrew Kerr, Gain of Function Communications Between EcoHealth Alliance and NIAID, White Coat Waste Project (Nov. 4, 2021) *available at* https://www.scribd.com/document/537027808/GainOf-Function-Communications-Between-EcoHealth-Alliance-And-NIAID.
[36] Latinne, A., Hu, B., Olival, K.J. et al., *Origin and cross-species transmission of bat coronaviruses in China*, Nature Communications (Aug. 25, 2020) available at https://www.nature.com/articles/s41467-020-17687-3.
[37] *Id.*

from the USAID Emerging Pandemic Threats PREDICT project, the Chinese Academy of Sciences (XDB29010101), and National Natural Science Foundation of China (31770175, 31830096).[38] The funding description for EcoHealth continues: "**All work conducted by EcoHealth Alliance staff after April 24th 2020 was supported by generous funding from The Samuel Freeman Charitable Trust, Pamela Thye, The Wallace Fund, & an Anonymous Donor c/o Schwab Charitable.**"[39]

In our review of available EcoHealth grant documents for NIH award R01AI11964, EcoHealth did not disclose the three named or anonymous financial sources.[40] However, because NIH has refused to cooperate fully with Congressional oversight and mostly released records under Freedom of Information Act (FOIA) requests to private entities, our review may be limited.

NIH terminated EcoHealth's award R01AI110964 in April 2020 due to noncompliance. The award was later reinstated and then immediately suspended on July 8, 2020. On May 29, 2020, EcoHealth board member Randy Schekman of the Li Ka Shing Center, University of California at Berkeley, emailed EcoHealth president Peter Daszak that Schekman would be the intermediary for a $500,000 donation to EcoHealth from an anonymous source to make up for the terminated NIH award:

> Dear Peter,
>
> I am part of the Rich Roberts group and helped to line-up more Laureates to join the petition to Azar and Collins. We don't expect a response from them but we wish to make a constructive contribution to your essential work and have resolved to help find private funds to offset your loss. Our first success is with a foundation that makes anonymous contributions to various causes including in support of biomedical science. I am pleased to report that this group will provide the Ecohealth Alliance a grant of $500,000 to at least partially offset the NIH funds that were withdrawn from your program. Since they wish to remain anonymous, I will be happy to serve as the intermediary in transfer of funds to your program. We can communicate about how to proceed.[41]

Instead of trying to cooperate with the NIH to get back into compliance, EcoHealth exploited the NIH's grant suspension to boost fundraising and get donations from private sources. We do not know the amount of private funding provided to, or used by, EcoHealth to continue work on its suspended NIH grant, but the notification of private funding in May 2020 and citation of private funding sources in the August 25, 2020, Nature Communications indicates resources were available to EcoHealth in lieu of the suspended grant award. Another recent

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[38] *Id.*

[39] *Id.*

[40] EcoHealth grant documents *available at* https://theintercept.com/document/2021/09/08/understanding-the-risk-ofbat-coronavirus-emergence/.
EcoHealth grant documents *available at* https://s3.documentcloud.org/documents/21089573/priority-grants-for-foia-request-55058-first-look-institute-2_redacted.pdf.

[41] U.S. Right to Know, *EcoHealth Alliance emails: University of Maryland* page 422 (Nov. 18, 2020) *available at* https://usrtk.org/wp-content/uploads/2020/11/Biohazard_FOIA_Maryland_Emails_11.6.20.pdf.

example of EcoHealth private funding is referenced in an August 31, 2020, publication that cites the Ford Foundation, the David and Lucile Packard Foundation, and Johnson & Johnson as additional private funding sources of EcoHealth.[42]

Additionally, an email from EcoHealth spokesperson Robert Kessler to EcoHealth board members noted how Dr. Daszak appearing on CNN with Chris Cuomo and on CBS "60 Minutes" resulted in private donations:

> P.S. An unexpected reaction to the 60 Minutes story has been an outpouring of support in my personal favorite form: donations. We've picked up more than $3,000 today alone with the donations still coming in. A couple dozen people have created Facebook fundraisers in our name, as well. While most of these donations are only small amounts, each represents a new supporter that the development team can cultivate and a new advocate for our work. Overall, a really exciting day for EcoHealth Alliance.[43]

Pursuant to the NIH grants financial conflict of interest policy, in alignment with 42 C.F.R. Part 50, each participating researcher is required "to submit an updated disclosure of significant financial interests within thirty days of discovering or acquiring (e.g., through purchase, marriage, or inheritance) a new significant financial interest."[44] Significant financial interest is defined as the aggregated value within the twelve months preceding the disclosure that exceeds $5,000.[45] EcoHealth is responsible for ensuring that all individual investigators, including subaward recipients, make all appropriate disclosures regarding other support, affiliations, and financial interests.[46] Likewise, NIH is responsible for ensuring that its grant recipients comply with all record and data retention requirements, including submission of records and data to NIH.

By virtue of funding EcoHealth's research without considering undisclosed private donations, NIH would have over-funded EcoHealth's award and thus, would have not funded other worthy research applications. The NIH needs to determine whether EcoHealth complied with these requirements for private donations. Any undisclosed conflict of interest also calls into question the scientific integrity and objectivity of EcoHealth's research.

In light of our concerns, please provide written responses to the following questions and copies of the following documents by March 24, 2022:

1. Will NIH investigate whether EcoHealth's research funded by NIH was also funded by USAID? If not, why not?

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[42] Roche, et al, *Was the COVID-19 pandemic avoidable? A call for a "solution-oriented" approach in pathogen evolutionary ecology to prevent future outbreaks* (Aug. 31, 2020) *available at* https://doi.org/10.1111/ele.13586
[43] U.S. Right to Know, *EcoHealth Alliance emails: University of Maryland* page 443 (Nov. 18, 2020) *available at* https://usrtk.org/wp-content/uploads/2020/11/Biohazard_FOIA_Maryland_Emails_11.6.20.pdf.
[44] C.F.R. Part 50
[45] 42 CFR § 50.603 Definitions, https://www.ecfr.gov/current/title-42/chapter-I/subchapter-D/part-50#p-50.605(b)
[46] NIH Grants Policy Statement, *Section 2.5.1 Just-in-Time Procedures* (last accessed January 10, 2022) *available at* https://grants.nih.gov/grants/policy/nihgps/HTML5/section_2/2.5.1_just-in-time_procedures.htm,

2. Please provide copies of all NIH correspondence to and from EcoHealth Alliance since the July 8, 2020, grant suspension.

3. Is NIH seeking a copy of the Year 6 progress report for the EcoHealth grant (covering the 2019 -2020 timeframe)? If not, why not? If so, please provide.

4. Please describe the NIAID's understanding of the DARPA proposal referenced in EcoHealth's Year Four progress report.

5. Please provide all emails, correspondence, or any documents related to the EcoHealth's discussions with the NIAID about research proposals or ideas with DARPA.

6. We are troubled that research sponsored by NIH must first be reviewed and approved by an institution in China before NIH receives the data. Is this process a special arrangement NIH authorized for EcoHealth? When did NIH become aware that a foreign institution was intervening in the contractual relationship between NIH and an NIH grant recipient? Before sponsoring research to be conducted in a foreign country, does the NIH evaluate the likelihood that the government of such country will prohibit the NIH from obtaining any materials or data related to such research?

7. Will NIH investigate how EcoHealth was able to report the humanized mice experiment results in the Year 4 and Year 5 progress reports since (1) EcoHealth admitted it does not have copies of the laboratory notebooks and electronic files; and (2) EcoHealth did not create or retain these records? If not, why not?

8. Did EcoHealth provide the WIV with access to the NIH eraCommons system for grantees?

9. How did NIH assess the conflicts of interest in EcoHealth's research involving its anonymous financial source and the private financial sources referenced on page two of this letter?

10. Did EcoHealth disclose the private donations to NIH? If not, what actions will NIH take to obtain this reporting? If yes, how did NIH assess the conflicts of interest?

If you have questions about this correspondence, please contact Alan Slobodin of the Minority Committee Staff.

Sincerely,

Cathy McMorris Rodgers
Ranking Member
Committee on Energy and Commerce

Brett Guthrie
Ranking Member
Subcommittee on Health

H. Morgan Griffith
Ranking Member
Subcommittee on Oversight and
Investigations

EXHIBIT 31

EXHIBIT 31

FRANK PALLONE, JR., NEW JERSEY
CHAIRMAN

CATHY McMORRIS RODGERS, WASHINGTON
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COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115
Majority (202) 225-2927
Minority (202) 225-3641

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Lawrence A. Tabak, D.D.S., PhD.
Acting Director
National Institutes of Health
9000 Rockville Pike
Bethesda, MD 20892

Dr. Tabak,

Our review of EcoHealth Alliance's reports about its humanized mice experiments at the Wuhan Institute of Virology (WIV) using funds from the National Institutes of Health (NIH) shows pervasive discrepancies, inconsistencies, and omissions in its progress reports and renewal application that raise serious questions about scientific and ethical misconduct, violations of NIH policies and regulations, and possible false statements and fraud. Accordingly, we request the NIH investigate Dr. Peter Daszak, the Principal Investigator of R01AIll0964, and other EcoHealth officials to determine whether certain data related to mice deaths and other material information were intentionally withheld during the peer review process for EcoHealth's grant renewal application.

A. History of Grant R01AIll0964

EcoHealth's National Institute of Allergy and Infectious Diseases (NIAID) grant R01AIll0964 was funded for June 2014 to May 2019. During this five-year term, EcoHealth was required to submit annual progress reports to the NIAID. Such submissions typically occurred around mid-April and were required before funding for the following year was provided. On or around November 5, 2018,[1] EcoHealth prepared and submitted a renewal application to NIAID, and the grant was renewed for another five years in May 2019. This renewal award was for $3.7 million plus a $369,819 increase over the first award.[2] At that point, EcoHealth received its funding for Year 6, the first year of its renewal grant. However, the renewal and funding

[1] This is based on what looks like a time stamp at the bottom of the first few pages of the renewal application.
[2] Letter from NIH Deputy Director for Extramural Research Michael Lauer, MD to Drs. Aleksei Chmura and Peter Daszak, EcoHealth Alliance (July 8, 2020) http://downloads.vanityfair.com/lab-leak-theory/Daszak_7_8_20_Reactivation_and_Suspension.pdf

occurred before EcoHealth attempted to submit its Year 5 progress report in late July 2019. EcoHealth claimed that it was locked out of the NIH system for submitting its Year 5 progress report, which remained unsubmitted until 2021.[3] In April 2020, concerns emerged about EcoHealth-funded research at the WIV, and NIH suspended the grant on July 8, 2020, which appears to remain suspended.[4]

B. Peer Review Process

Our concerns over EcoHealth's reporting of the humanized mice experiments and how it affected review of its grant must be seen in the context of the NIH peer review process. Unlike the general review of progress reports by the grant officer, the goal of peer reviewers is to perform an in-depth look at the data to see what the grant would accomplish over the next five years. All NIH grant, fellowship, and cooperative agreement applications undergo review through a two-tiered system of peer review, a competitive and committee-based process to evaluate the applications.[5] The required peer review system was established pursuant to section 492 of the Public Health Service Act (42 U.S.C. §289a), and federal regulations (42 C.F.R. §52).[6]

In the first stage, the applications are received by the NIH Center for Scientific Review (CSR), who then assigns each application that meets basic requirements to both a potential awarding IC and an associated Scientific Review Group (SRG) of the IC.[7] The potential awarding IC (Institutes and Centers) is the one whose mission best aligns with the objectives of the research project.[8] An SRG is a peer-review committee composed of 12 to 22 scientists who are experts in the relevant fields of research. No more than one-fourth of the members of any SRG may be federal employees.[9] The SRG is responsible for evaluating a grant proposal on the basis of scientific merit and potential impact of the research. After discussing the application, each member gives the application a final score, and an overall impact score is determined from the average of members' final scores. The application is also given a percentile ranking, based on how the overall impact score compares to other applications reviewed by the SRG in the past year.[10]

In the second stage, the funding decisions are refined by the National Advisory Councils or Boards of the potential awarding ICs. Advisory Councils and Boards are composed of scientific and lay representatives. These groups examine applications recommended for funding,

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[3] EcoHealth's explanation for the delayed submission of the Year 5 report does not make sense. Dr. Daszak claimed that EcoHealth was ready to submit its Year 5 progress report at the end of July 2019, but EcoHealth was locked out by the NIH's data system. However, even if this were true, the question remains: Why didn't EcoHealth simply submit its Year 5 progress report by email to its grant officer? Even though it would not have been in the eraCommons system used by grantees, EcoHealth at least would have gotten its submission to the NIAID until submission into the eraCommons system could be figured out.

[4] Letter from Dr. Michael Lauer, NIH to Dr. Peter Daszak, EcoHealth Alliance (July 8, 2020).

[5] NIH, Report of the Director of the National Institutes of Health: Fiscal Years 2014 & 2015, p. 25, https://report.nih.gov/biennialreport/NIH_Biennial_Report_2014-15_non508.pdf.

[6] NIH, Peer Review," at https://grants.nih.gov/grants/peer-review.htm (accessed April 4, 2022).

[7] NIH, Peer Review," at https://grants.nih.gov/grants/peer-review.htm (accessed April 4, 2022).

[8] *Id.*

[9] NIH, Peer Review," at https://grants.nih.gov/grants/peer-review.htm (accessed April 4, 2022).

[10] NIH, "Peer Review-Scoring," at https://grants.nih.gov/grants/peer-review.htm#scoring

place their impact scores and percentile rankings in the context of the IC's research priorities, and then make recommendations for final funding decisions.[11]

C. EcoHealth's proposed humanized mice experiment

As noted in our October 30, 2021, letter to NIH, EcoHealth first proposed testing chimeric SARS-like viruses in a humanized mice experiment to evaluate pathogenicity in the spring of 2016. The NIH approved this research in July 2016 with the condition that EcoHealth immediately stop its experiments and report to the NIH if there was more than one log of virus growth in any of mice groups infected with one of the chimeric viruses. Peculiarly, EcoHealth did not specify in its proposal to NIH how pathogenicity would be evaluated in an animal experiment, and NIH did not follow-up to ask for such information.[12]

In addition to gain-of-function research concerns, it appears NIH approved an animal experiment without knowing the number of animals that would be involved and potentially harmed. Despite EcoHealth and NIH's conclusion that there was no potential gain-of-function concern (which seems counter to the purpose of the grant),[13] the results of the experiments showed all three chimeric viruses were more lethal compared to the WIV-1 virus.

Notably, one condition that NIAID did impose on the research proposal related to enhanced virus growth, per the grant documents:

> NIAID acknowledges that if any of the MERS-like or SARS-like chimeras generated under this grant show **evidence of enhanced virus growth greater than 1 log over the parental backbone strain**, Dr. Daszak will immediately stop all experiments w/ these viruses and provide the NIAID Program Officer and Grants Management Specialist, and Wuhan Institute of Virology Institutional biosafety Committee, with the relevant data and information related to these unanticipated outcomes. (Emphasis added).

However, NIAID requested that EcoHealth clarify the location of the experiment since EcoHealth previously indicated that the experiment would be conducted at the University of North Carolina (UNC). However, on June 27, 2016, Dr. Daszak clarified that the experiment

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[11] NIH, Peer Review," at https://grants.nih.gov/grants/peer-review.htm (accessed April 4, 2022).

[12] This is contrary to animal research reporting guidelines that state, "Clearly define all outcome measures assessed (e.g., cell death, molecular markers, or behavioural changes)." Nathalie Percie du Sert, *et al*, Reporting animal research: Explanation and elaboration for the ARRIVE guidelines 2.0, PLOS Biology (July 14, 2020) available at https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.3000411

[13] "Moreover, we are introducing progressively more distant S glycoproteins into WIV1 (The RBD of Rs7327 differs from WIV1 in several amino acid residues while RsSHC014 is even more distantly related phylogenetically), so it seems progressively less likely that any of these viruses would be more pathogenic or transmissible than the SARS-CoV." June 8, 2016, EcoHealth letter to NIH (per notes taken by Minority Committee staff Oct. 5, 2021, during bipartisan *in camera* review).

would be conducted at the WIV, and he assured NIH that the WIV would immediately notify EcoHealth of such enhanced virus growth:

> You are correct to identify a mistake in our letter. UNC has no oversight of the chimera work, all of which will be conducted at the **Wuhan Institute of Virology**…. We will clarify tonight with Prof. Zhengli Shi[14] exactly who will be notified if we see enhanced replication…**my understanding is that I will be notified straight away**, as [principal investigator], and that I can then notify you at NIAID. Apologies for the error! (Emphasis added).[15]

Even though EcoHealth received approval for the risky research from NIAID in the early weeks of Year 3, EcoHealth and the WIV did not report the experiment until the Year 4 report. It appears that during Year 3, EcoHealth arranged to get the humanized mice for the experiment imported to China. More transgenic mice were then constructed and bred before the experiment was conducted.[16]

D. EcoHealth's Descriptions of Humanized Mice Experiment

As far as we are aware, neither EcoHealth nor the WIV published the details of these experiments in scientific literature, nor are there indications that such publication was even intended. Thus, available details of the experiment are limited to three key documents that described aspects of the mice experiment: the Year 4 progress report, the renewal application for NIAID grant R01AIll0964, and the Year 5 progress report.

i. The Year 4 progress report (June 2017-May 2018)

The experiment involved infecting four groups of humanized mice with different SARS-like bat viruses, with three groups getting infected with chimeric SARS-like viruses. During the Year 4 reporting period between June 2017 and May 2018, the WIV conducted one experiment that caused some Angiotensin-Converting Enzyme 2 (ACE2) Receptor humanized mice to get sick within six days after infection, and some to die within two weeks. However, EcoHealth split the disclosure of the experiment's data into two parts: (1) weight loss data and viral load in lung tissue in the Year 4 report and the renewal application; and (2) the deaths, viral load in brain tissue, and two photos of lung tissue in the Year 5 report.

As we stated in our February 24 letter, EcoHealth claimed in October 2021 that it conducted a single risky virus infection experiment in one year, but split up the reporting into two different years. The wording of the reports and the renewal application can be read as if there were two experiments. The report stated, "we continued with in vivo infection experiments."[17] If the report accurately reflected Dr. Daszak's claim, then the report should have

[14] Dr. Shi leads bat coronavirus research at the WIV.
[15] Katherine Eban, "This Shouldn't Happen": Inside the Virus-Hunting Nonprofit at the Center of the Lab-Leak Controversy, Vanity Fair (March 31, 2022), Inside the Virus-Hunting Nonprofit at the Center of the Lab-Leak Controversy | Vanity Fair
[16] Year 3 Report, at 253.
[17] EcoHealth Alliance Year 5 progress report at 15.

read "we continued data analysis of in vivo infection experiments." The plain meaning of the text does not support Dr. Daszak's assertion.

Further, the term "experiments" is plural, incorrectly suggesting more than one experiment. In the Year 4 progress report, the experiment was characterized as "preliminary," but, interestingly, the word "preliminary" does not appear in the Year 5 progress report description. Yet, more significantly, the Year 5 report makes no mention of the weight loss data from the Year 4 report that would show it was a continuation of the same study.[18]

According to the Year 4 progress report:

> In Year 4, we performed **preliminary** in vivo infection of SARSr-CoVs on transgenic mice that express hACE2. Mice were infected with 10^5 pfu of full-length recombinant virus of WIV1 (rWIV1) and the three chimeric viruses with different spikes. Pathogenesis of the 4 SARSr-CoVs was then determined in a 2-week course. Mice challenged with rW IV1-SHC014S have experienced about 20% body weight loss by the 6th day post infection, while rWIV1 and rWIV-4231 S produced less body weight loss. In the mice infected with rWIV1-WIV16S, no body weight loss was observed (Fig. 35a).[19] (Emphasis added).

The Year 4 (2017-2018) progress report disclosed weight loss results in the infected mice (Figure 35(a) included below) and a graph showing virus growth in mice lung tissue for the first few days during the two-weeks and then from the "dead point" (Figure 35(b) included below). However, the graph showing the weight loss results only showed results up to 6 days post-infection, even though it was a two-week experiment. Notably, it was on the sixth day of the experiment that the first mouse death occurred according to Figure 13(a) in the Year 5 report. For example, there is no weight loss data for days 8, 10, 12, and 14 post-infection.[20]

The graph showing the viral load in lung tissue also only showed measurements up to six days (again without data for days 8, 10, 12, and 14) but then included measurements at the "dead point." However, the "dead point" was not defined or explained. Most significantly, the lung graph did not imply mice deaths from the virus. The mice deaths could have reflected the sacrificed mice made either to obtain the lung tissue samples or to prevent further suffering from the mice during the experiment in accordance with animal welfare requirements.

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[18] The Year 5 report included two photographs of lung tissue sections to showcase the difference in pathogenicity between the most lethal virus and the least lethal virus. However, such a visual would have attracted more attention at the study panel review into the extent of the virulence that EcoHealth appeared to be trying to conceal. EcoHealth should have linked this photographic evidence with the viral load in the lung tissue graph in the Year 4 report, but no linkage was made between the photographs in the Year 5 report and the graph in the Year 4 report.

[19] HHS docs at 297, Year 4 report at 24. EcoHealth grant documents *available at* https://theintercept.com/document/2021/09/08/understanding-the-risk-ofbat-coronavirus-emergence/.

[20] EcoHealth may have chosen not to report additional weight loss results because the mice were dying at such a high rate, the data would be biased toward the heavier, healthier mice that survived. On the other hand, if the mice mounted an immune response to the virus, then that data was not shared.

Additionally, Figure 35(b) showed viral growth in the experiment that implicated the NIH policy of stopping the experiment if more than one log of viral growth occurred. There is no evidence that EcoHealth complied with NIH's condition to stop this experiment since it continued past the point of excessive viral growth and there was no evidence of stoppage or any notification to NIAID. EcoHealth apparently reported the experiment in the Year 4 progress report well after the experiment was completed. Overall, EcoHealth vaguely characterized the experiment: "These results demonstrate varying pathogenicity of SARSr-COVs with different spike proteins in humanized mice."

ii. EcoHealth's renewal application (November 2018).

EcoHealth's application for competitive renewal sent later in 2018 for its grant included the same Year 4 report data but conspicuously omitted the word "dead" from the lung tissue graph. But this time EcoHealth provided some interpretation. EcoHealth pointed out that the results demonstrated that "pathogenicity of SARSr-CoVs in humanized mice differs with divergent S proteins, thus confirming the value of this model in assessing novel SARSr-COV pathogenicity."[21] In addition, EcoHealth mentioned that the WIV had vaccinated the humanized mice infected with the SHC014 chimeric virus and the WIV-1 virus. The renewal application stated that the vaccine did not reduce clinical symptoms in the SHC014-infected mice, but the vaccine cross-neutralized two out of the four monoclonal antibodies in the WIV-1–infected mice. However, none of this data was actually shown nor any other substantiating details provided.[22]

Most significantly, EcoHealth used the experiment results to help make the case for grant renewal. EcoHealth asserted that its humanized mice work had three implications for its R01 renewal:

> (1) some SARS related CoVs currently circulating in bats in southern China **are likely able to infect and replicate within people**; (2) clinical outcomes of infection may include SARS-like illness that is **not treatable with monoclonal antibodies nor preventable with experimental vaccines**; (3) SARS related coronavirus ability to bind human ACE2 is lost with S protein divergence between 10 and 24 percent. **Although no viruses within this range have so far been described, these strains likely used hACE2 but could escape existing vaccines and immunotherapeutics and represent significant public health threats.** In our R01 renewal proposal, we will actively seek to identify viruses with this level of S protein divergence, characterize their binding targets in vitro, and their capacity to produce SARS-like disease that evade immunotherapy and vaccination in vivo. (Bolded in original).

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[21] EcoHealth Alliance grant renewal application at 162 *available at* Understanding the Risk of Bat Coronavirus Emergence - The Intercept

[22] Again, since there has been no publication of the experiment and publication does not appear to have been intended. EcoHealth could make these assertions in NIH documents without substantiation.

iii. Year 5 progress report (June 2018 – May 2019).

The Year 5 progress report disclosed death data, a graph of virus load in brains of infected mice, and two photographs of viral load impact on lung tissue of infected mice.[23] However, the submission of EcoHealth's progress report for Year 5 that included the mice death data was delayed and not received by the NIH until August 2021.[24] The Year 5 progress report (due in September 2019, but submitted to NIH in August 2021) stated:

> In Year 5, we **continued** with in vivo infection **experiments** of diverse bat SARSr-CoVs on transgenic mice expressing human ACE2. Mice were infected with 4 strains of SARSr-CoVs with different S protein, including the full-length recombinant virus of SARSr-CoV WIV1 and three chimeric viruses with the backbone of WIV1 and S proteins of SHC014, WIV16 and Rs4231, respectively. Pathogenicity of the 4 SARSr-CoVs was evaluated by recording the survival rate of challenged mice in a 2-week course. All of the 4 SARSr-CoVs caused lethal infection in hACE2 transgenic mice, but the mortality rate vary among 4 groups of infected mice (Fig. 13a). 14 days post infection, 5 out of 7 mice infected with WIV1 remained alive (71.4%), while only 2 of 8 mice infected with rWIV1-SHC014 S survived (25%). The survival rate of mice infected with rWIV1-WIV16S and rWIV1-4231S were 50%. (Emphasis added).

E. Dr. Daszak Claimed There Was Only a Single Experiment

The wording in the progress reports and the renewal application appeared to show two experiments in different reporting years.[25] As a result, in October 2021, NIH wrote to EcoHealth mentioning the experiment discussed in the Year 5 progress report and informed EcoHealth that the research violated the one log virus growth policy.

In its defense, EcoHealth claimed that it complied with the policy because EcoHealth now claimed it was a single experiment conducted in Year 4 in which some of the results were reported in the Year 4 progress report, with the deaths results reported in the Year 5 progress report. In his October 26, 2021, response,[26] Dr. Daszak claimed the humanized mice experiment discussed in both progress reports was one study:

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[23] EcoHealth grant documents *available at* https://theintercept.com/document/2021/09/08/understanding-the-risk-ofbat-coronavirus-emergence/.

[24] *Id.*

[25] According to one expert contacted by staff who is familiar with such studies, two different experiments would have been standard practice. The Year 4 experiment would have been a preliminary small study assessing weight loss (probably with four or fewer mice per group, which is a number of mice sufficient to provide interpretable weight-loss data but not sufficient to provide interpretable survival-rate data), and a follow-up large study (perhaps with 10 or more mice per group). However, this experiment was conducted in China, not in the U.S.

[26] EcoHealth Oct. 26, 2021, letter to NIH *available at* https://www.documentcloud.org/documents/21097880-ecohealth-letter-contesting-claims.

> Firstly, Dr. Tabak's letter appears to refer to our year 5 report, and we note that in your email accompanying you also refer to a Figure 13 from that year 5 report. However, as is visible in the pattern of viral genome measurements, this figure closely resembles Figure 35 from our year 4 report, but with follow-up histopathological and survival data added (both are inserted, below).[27] The reason for this is that both figures are from the same experiment – conducted in 2018 and, as noted above, reported rapidly to NIH on 13th April 2018 in our Year 4 report.[28]

In his March 2022 interview with *The Intercept*, Dr. Daszak further explained how there was only one humanized mice experiment.[29] First, he stated that EcoHealth Alliance essentially cut and pasted the report section sent by the WIV on the experiment:

> Here's what happens, it's a very standard procedure: We are subcontracting to a lab in China to do some work. Every year we have to file a report to NIH to tell them what we've done for the year, how we've spent the money, and whether we've achieved the goals of the grant. So, we contact our subcontractees and we say, 'Send us the information. Let us know what successes you've had this year and whether you've had problems and issues. Put it all in a report and send it to us.' And then we use that to produce a report for NIH. That's why there are some editing issues around that. We move them around a bit, and we send a final report.

He then detailed how the reporting of one humanized mice experiment was split between two progress reports:

> This is a simple issue of Chinese nationals writing a report and then us drafting our report to NIH. So there's a word in there where they say we continued the studies. That doesn't mean they continued infecting mice with new viruses. No. What it means is they continued doing the research on the one experiment that they've done. And that continuation is a lot of work. So they did all the pathology, which means at the end of the experiment, you take all the mice, and you look at every organ in the body. You

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[27] While Dr. Daszak depicted the "pattern of viral genome measurements" and the results in Figure 35 in the Year 4 report and in Figure 13 in the Year 5 report as "closely" resembling each other, a closer examination revealing data discrepancies shows otherwise. This is discussed in a latter section of the letter.

[2828] EcoHealth grant documents posted by *The Intercept* (Oct. 21, 2021) *available at* https://theintercept.com/document/2021/09/08/understanding-the-risk-ofbat-coronavirus-emergence/. As we noted in a previous letter, EcoHealth was not in compliance with the NIH policy even with the Year 4 progress report because the experiment was not stopped when the excessive virus growth occurred while it was being conducted. Instead, EcoHealth reported the experiment after it had been completed.

[29] Sharon Lerner and Mara Hvistendahl, Peter Daszak Answers Critics and Defends Coronavirus Research, The Intercept (March 11, 2022), Peter Daszak Answers His Critics, Defends EcoHealth Alliance (theintercept.com)

> do detailed microscopical analysis. It takes months. So that's why it dragged on because you've got months of after-the-experiment analysis. And we included the mortality data as part of the pathology data. That's completely normal."[30]

F. Financial Pressures on EcoHealth

As recently reported by *Vanity Fair*,[31] EcoHealth faced a "brewing financial crisis" in 2017 and 2018 leading up to the time EcoHealth submitted its grant renewal application to the NIAID in 2018. Ninety-one percent of EcoHealth's funding came from the federal government, with 71 percent of that funding from the PREDICT grant from the U.S. Agency for International Development. The renewed PREDICT II grant was scheduled to end in two years. EcoHealth did not know if this grant would be reauthorized. This looming possibility was known within EcoHealth as the "PREDICT cliff." These financial concerns consumed EcoHealth in meeting after meeting.[32]

To offset this potential loss of funding, EcoHealth sought a grant with the Defense Advanced Research Projects Agency (DARPA) in March 2018, which was ultimately declined. However, at a March 29, 2018, EcoHealth staff meeting, Dr. Daszak expressed his concerns about the amateur nature of the DARPA submission, calling it "a major failure on all accounts"[33] and he demanded a "change in culture" as "part of [a] mentaility [sic] to get money."[34] Notably, it was during this time of financial urgency and the push for a culture "to get money" that EcoHealth submitted its Year 4 progress report on April 13, 2018, and its grant renewal application in November 2018.

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[30] Dr. Daszak's statement is contradicted by the Year 4 report that included the lung pathology data but not the mortality data.
[31] Katherine Eban, "This Shouldn't Happen": Inside the Virus-Hunting Nonprofit at the Center of the Lab-Leak Controversy, Vanity Fair (March 31, 2022), Inside the Virus-Hunting Nonprofit at the Center of the Lab-Leak Controversy | Vanity Fair
[32] *Id.*
[33] *Id.*
[34] *Id.*

G. The mice death cover-up

The renewal application for the EcoHealth grant concealed the mice deaths by reproducing the two figures from the Year 4 report, but deleting the word "dead" from the term "dead point" in the lung tissue graph:

Figure 35 – Year 4 Report (with "dead point")

B.2 (Year 4 NIAID CoV Report_Final for eRA Commons.pdf)

1R01AI110964 Year 4 Report PI: Daszak, Peter

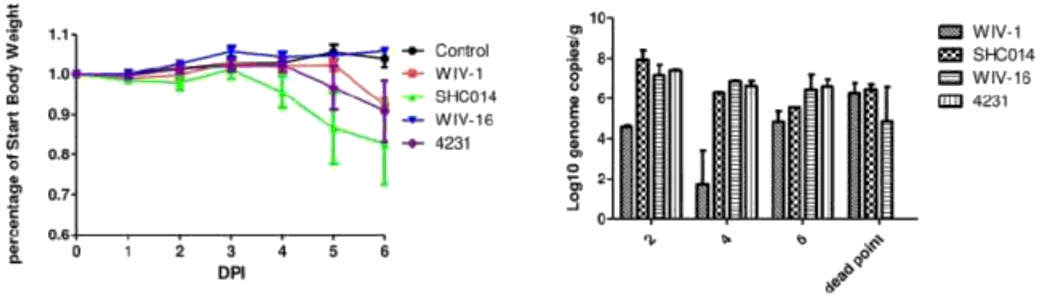


Figure 35. *In vivo infection of SARSr-CoVs in hACE2-expressing mice. (a, left) Body weight change after infection; (b, right) Viral load in lung tissues*

However, the renewal application for the EcoHealth grant shows that the word "dead" was defaced and deleted, but still includes the DPI line for the weight loss graph (Figure 6(b) is reproduced and enlarged for readability):

Figure 6 – Renewal Application (with defaced and deleted "dead" from "dead point")

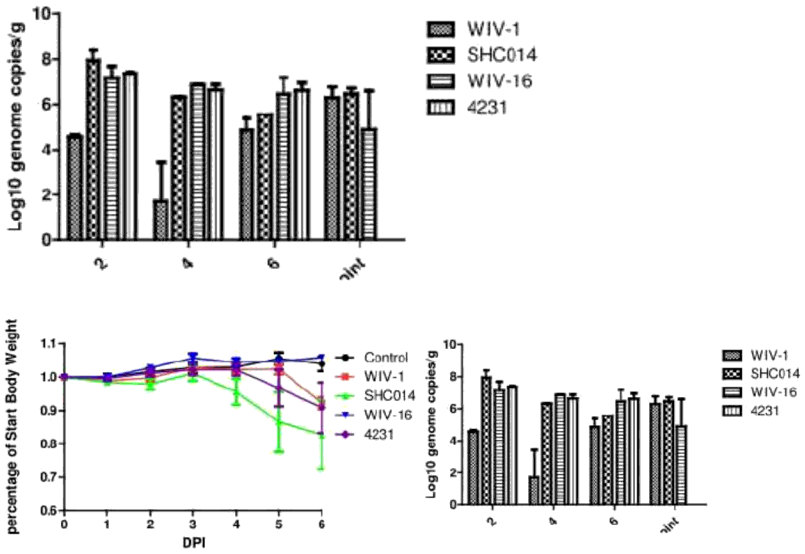
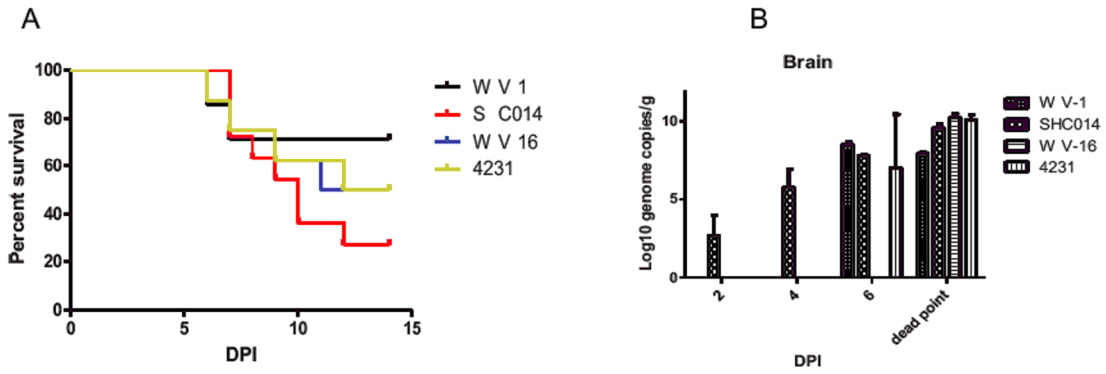


Fig. 6: *In vivo* infection of SARSr-CoVs in hACE2 transgenic mice. **6a (left)** Body weight change after infection; **6b (right)** Viral load in lung tissues.

Infection of rWIV1-SHC014S caused mild SARS-like clinical signs in the transgenic hACE2 mouse model **that weren't**

In the Year 5 report, EcoHealth has no problem including the word "dead" under the brain tissue graph:

Figure 35 – Year 5 Report (with "dead point")



There is no apparent reason why EcoHealth was able to include the word "dead" in the Year 4 and Year 5 report graphs, but not in the graph in the renewal application. Without the word "dead" with Figure 6(b), the lung tissue graph would not have implied mice deaths; it would have implied only increasing viral loads. As such, this looks suspiciously tailored to delete this word in a document that would be reviewed by subject matter experts in the peer review process who were independent of NIAID.

Further, the renewal application, unlike the Year 4 report, stated that the presented information showed that the mice infected with SHC014 only had "mild" SARS-like clinical signs that were not reduced by immune-therapeutic monoclonals that reduce SARS pathogenicity or by vaccines. However, the Year 5 report with the mice death data showed that the SHC014 produced a staggering 75 percent death rate. Thus, the portrayal of the SHC014 infected mice as having mild symptoms when EcoHealth would have known of the 75 percent death rate strongly suggests EcoHealth intended to deceive the peer reviewers.

Finally, the deletion of the word "dead" in Figure 35(b) suggests that EcoHealth believed including "dead point" would have triggered questions from the peer reviewers about the deaths. It appears the word "dead" was taken out to conceal the deaths from the peer reviewers, which raises scientific and ethical concerns.[35]

H. Why Concealing the Mice Deaths Mattered

EcoHealth found itself with unpleasant choices. It could admit that it was doing gain-of-function research, or risk losing money it desperately needed from NIAID. Given the financial pressures it was facing and the culture of "getting money" created by Dr. Daszak, the presentation of the humanized mice data in the renewal application appears intentional.

[35]S. Moran and R. Huneke, The Role of IACUCs in Responsible Animal Research, ILAR Journal (November 2019), https://academic.oup.com/ilarjournal/article/60/1/43/5618668

If the mice deaths had been disclosed, it is reasonable to expect that the peer reviewers would have noted these results and the discrepancies in the data when the data of both Year 4 and Year 5 reports are combined. Had the peer reviewers seen the mice death data from the survival rate graph held back for the Year 5 report, they would have known mice were dying at high rates from the chimeric viruses in a risky experiment. There was a significant probability that reviewers would have wanted to stop such risky research and not continue EcoHealth's funding.

I. Dr. Daszak's Explanation for the Delayed Mice Death Reporting is Suspect

In his March 2022 interview with *The Intercept*, Dr. Daszak stated that the reporting of the mice deaths was delayed because months of pathology work needed to be done. This explanation does not make sense because EcoHealth was able to include lung pathology work in the Year 4 progress report. The renewal application, which appears to have been submitted to the NIH in early November 2018, was seven months after the April 2018 submission of the Year 4 report data, presumably more than enough time to have done pathology work.

Additionally, Dr. Daszak's claims about the length of time needed for pathology work appear dubious. Minority committee staff consulted with scientific experts who are either board-certified in pathology or have conducted humanized mice experiments with coronaviruses and staff found no support for the notion that such pathology work would take months. In fact, two experts indicated that pathology takes a week or so since tissues need to be fixed for 24 hours and then processed and stained. One expert told staff that EcoHealth's assertion that reporting of survival data would need to be deferred until pathology work was done was comical.

Even if Dr. Daszak's assertion were true, there is no basis that we are aware of that justifies holding back the death data that EcoHealth already had. In fact, animal welfare regulations suggest that it would be unethical to withhold or delay reporting the death data. The WIV and EcoHealth could have, and should have, reported the death data and told NIH that the pathology work was continuing.

Using the mice death data generated during Year 4 for the Year 5 report also raises questions about how EcoHealth and the WIV actually spent the Year 5 funds for laboratory research since no new mice experiments were apparently conducted in Year 5 given EcoHealth's claim of a single experiment conducted in Year 4. It does not make sense that the pathology work for the lung tissue up to the "dead point" was done in time for inclusion in the Year 4 report, but the pathology work for the viral load in brain tissue up to the "dead point" could not be done in time for the Year 4 report and/or the renewal application. It does not explain why the death data could not have been included in the Year 4 report since lung tissue data with a "dead point" were also submitted in the Year 4 report.

Dr. Daszak's explanation does not explain why the Year 4 report data submitted in April 2018 were not updated with death data for the renewal application that was sent months later in 2018. If Dr. Daszak's statement about the delay in reporting the deaths because of the time needed to do pathology work were true, then there should have been no lung measurements up to

the "dead point" of the experiment included in the Year 4 report. Nor did Dr. Daszak make any distinctions between the lung work and brain work on the length of time to do the pathology work.

J. Discrepancies and Omissions in EcoHealth's Reports

i. "Dead point" Not Defined

As we noted in our previous letter, EcoHealth's Year 5 progress report was riddled with errors, such as mislabeled graphs.[36] Our further examination of the Year 4 and Year 5 reports on the humanized mice research shows the results of the experiment(s) have many discrepancies and omissions. As already noted, the so-called "dead point" in the experiment was not defined or explained.

ii. No Mention of Sample Size

In addition, none of EcoHealth's descriptions of the experiment mention the sample size. For the Year 4 report and renewal application, there is no mention of sample size of any kind, and the Year 5 report only noted that there were 9 mice in the control group and 7 mice in the group that had the most deaths.[37] However, neither the number of mice in the other two groups nor the overall number of mice in the study are mentioned. This is contrary to animal research reporting guidelines that state "Specify the exact number of experimental units allocated to each group, and the total number in each experiment. Also indicate the total number of animals used."[38] By omitting or keeping the mice number vague, EcoHealth was able to hide additional mice deaths resulting from sacrifices made to obtain tissue samples or to mitigate suffering.

iii. Discrepancies in Pathogenicity Results

In the Year 4 report, the WIV 16S infected-mice group had no weight loss, an indication of no pathogenicity. In the Year 5 report, the 16S infected group had a 50 percent death rate while the WIV 1 infected control group had a 29 percent death rate. Thus, for the group infected with the 16S chimeric virus, the experiment in the Year 4 report showed no pathogenesis in terms of weight loss, but the full two-week study in the Year 5 report showed a 50 percent death rate, evidence of pathogenesis. The WIV 1 group had a 29 percent death rate, even though this group had more weight loss (more pathogenesis) than the 16S group had.

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[36] Letter from House Energy and Commerce Committee Republican Leader Cathy McMorris Rodgers, Republican Health Subcommittee Leader Brett Guthrie, and Republican Oversight and Investigations Subcommittee Leader Morgan Griffith to Dr. Lawrence A. Tabak, Acting Director of the NIH (February 24, 2022).

[37] Assuming the other two mice groups were of similar number, the total number of mice used in a single study would have been more than 30, not the typical number in a preliminary in vivo infection study. Given the expense of mice and minimizing the number of mice sacrificed, the number in a preliminary study would be much smaller, according to an expert consulted by staff.

[38] Nathalie Percie du Sert, *et al*, Reporting animal research: Explanation and elaboration for the ARRIVE guidelines 2.0, PLOS Biology (July 14, 2020) available at https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.3000411

The lung tissue results were not consistent with the weight loss findings. The group with no weight loss and the group with the highest weight loss had nearly the same number of logs of virus growth at the "dead point" of the experiment.[39]

In the Year 4 report, in Figure 35(b), there is no bar for the 4231-infected group at the dead point in the bar graph on the viral loads in lung tissue, although the bar for the 4231 group is represented in measurements taken 2, 4, and 6 days post-infection. As noted before, during the time that mice deaths were accruing, there were no results for days 8, 10, and 12, and it is inexplicable why the 4231-infected mice data for the "dead point" would be missing in Figure 35(b).

The viral load in brain results in Figure 13b were not consistent with the death results in Figure 13a. The group infected with SHC014 that had the highest death rate (75 percent) had less virus growth in the brain than the amount of virus growth in the brain in the two groups that had a 50 percent death rate. Groups with different death rates had similar viral loads in the brain suggesting that the viral loads in brain tissue may not have been as pertinent as viral loads in lung tissues in its association with pathogenicity. But this issue was not distinguished or pursued.

iv. Missing Data

The Year 5 report stated, "Viral replication was confirmed by quantitative PCR in spleen, lung, intestine, and brain of infected mice." However, the PCR viral replication data for the spleen and intestine were not included in the report. Perhaps if EcoHealth and the WIV had published the experiment in scientific literature, complete data sets would have been provided. However, it has been more than four years since the experiment was conducted and we have been unable to find any publication about this experiment. Notably, even Dr. Daszak admitted EcoHealth did not have the lab notebooks or the electronic files for the experiment and claimed that such records were in China.[40]

K. EcoHealth Also Masked Its Violation of NIH Policy on Virus Growth

Even with the Year 4 report's focus on mice weight loss, EcoHealth violated the NIH grant policy that required experiment stoppage when more than one log of viral growth occurred

[39] EcoHealth's Year 4 report description of the mice experiment only focused on the early lung viral loads that were consistent with its assertion that the chimeric virus-infected mice had greater pathogenicity than the WIV1-infected mice. However, EcoHealth's description did not include the later results in the experiment that were inconsistent with this pattern. EcoHealth wrote, "2 and 4 days post infection, the viral load in lung tissues of mice challenged with rWIV1-SHC014S, rWIV1-WIV16S and rWIV1-Rs4231 S reached more than 10 to the 6 genome copies/g and were significantly higher than that in rWIV1-infected mice (Fig. 35b). These results demonstrate varying pathogenicity of SARSr-CoVs with different spike proteins in humanized mice." However, Fig. 35b also showed that 6 days post infection the rWIV1-infected mice had viral loads only slightly less than the other infected mice. In fact, at the dead point, rWIV1-infected mice had higher viral loads in lung tissue than the load in the 4231 S group and almost the same viral load as the SHC014S group.

[40] Letters to EcoHealth Alliance (Jan. 11, 2022) *available at* https://republicans-oversight.house.gov/wp-content/uploads/2022/01/January-2022-EHA-SAC-CAP-letter-final1.pdf.

with the one of the chimera-infected mice groups compared to the viral growth in the control group. The violation is supported by the bar graph in Figure 35(b) showing the excessive viral growth in lung tissue. However, the text of the report does not discuss mice deaths nor quantify the extent of viral growth.[41] Moreover, the weight loss graph stops at 6 days and not for the full two-week period. In contrast, the survival graph in the Year 5 report covered the full 14 days.

It is now apparent how this violation occurred. Contrary to its assurance to NIAID in 2016 about the WIV reporting to Dr. Daszak "right away," EcoHealth had no real-time knowledge of this experiment. It appears EcoHealth simply benefited financially by being a pass-through for the WIV.[42] Based on Dr. Daszak's statement to *The Intercept* about cutting and pasting the WIV excerpts into progress reports, EcoHealth did not know about the virus growth until the WIV sent in its report section for the Year 4 report about the experiment that was already completed.

The concerns raised here have profound implications on the integrity of the peer review process. More investigation needs to be conducted to obtain more complete and accurate information about the humanized mice experiment. In addition to investigating the above concerns, please respond to the following by May 16, 2022:

1. Why did NIAID provide renewal grant funding to EcoHealth before EcoHealth filed its Year 5 Progress Report?

2. Why did NIAID neglect or willfully ignore EcoHealth's missing Year 5 progress report for nearly two years?

3. Why would NIAID fund a study that does not report its sample size? What are the scientific standards for these studies to meet on detailing sample size?

4. Animal experiments are highly regulated, and EcoHealth and the WIV should have very detailed records about the mice experiments. Did NIAID monitor this grant for compliance with animal welfare regulations or ABSL3 (Animal Biosafety Level 3) regulations? Why or why not?

5. When NIAID reviewed EcoHealth's research proposal to study pathogenesis of SARS-related viruses in humanized mice, did the NIAID approve only one experiment? Was EcoHealth authorized by NIH to conduct as many as experiments as it wanted pursuant to the proposal submitted to NIH? Other than the viral growth policy, were there any other restrictions or conditions on EcoHealth's authority in conducting the humanized mice experiment?

[41] EcoHealth only stated that the viral load in mice infected with the three chimeras had "significantly higher" growth than that in the WIV-1 infected mice.
[42] EcoHealth would receive the financial benefit by charging the grant for the WIV overhead and would hold some of that overhead charge for itself.

6. Is it permissible for an NIH grantee to withhold and delay reporting of data on deaths in an animal experiment? If so, under what circumstances?

7. What animal welfare regulations applied to the humanized mice experiment, and was EcoHealth in compliance with those regulations?

8. If a grantee submits a research plan involving an animal experiment on pathogenicity for NIH's review, does the grantee need to specify how pathogenicity is evaluated? Or can the grantee evaluate pathogenicity through a survival study that could result in animal deaths without explicitly informing the NIH?

9. Why did NIAID not seek details on the kind of pathogenicity study that EcoHealth wanted to pursue with the WIV?

10. When was the EcoHealth application reviewed by the SRG for renewal? When did NIAID finalize the decision?

11. What are the implications of grant applicants selectively sharing data that may be material to the funding decision? What is NIH policy in this area?

If you have questions about this correspondence, please contact Alan Slobodin of the Minority Committee Staff.

Sincerely,

Cathy McMorris Rodgers
Ranking Member
Committee on Energy and Commerce

Brett Guthrie
Ranking Member
Subcommittee on Health

H. Morgan Griffith
Ranking Member
Subcommittee on Oversight and Investigations

Cc: The Honorable Frank Pallone, Chair, House Energy and Commerce Committee
The Honorable Anna Eshoo, Chair, Subcommittee on Health
The Honorable Diana DeGette, Chair, Subcommittee on Oversight and Investigations
The Honorable Christi Grimm, HHS Inspector General
Elena Fuentes-Afflick, M.D., M.P.H., Home Secretary, National Academy of Medicine

EXHIBIT 32

EXHIBIT 32

FRANK PALLONE, JR., NEW JERSEY
CHAIRMAN

CATHY McMORRIS RODGERS, WASHINGTON
RANKING MEMBER

ONE HUNDRED SEVENTEENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE

2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115
Majority (202) 225-2927
Minority (202) 225-3641

July 21, 2021

The Honorable Francis Collins, M.D., Ph.D.
Director
National Institutes of Health
9000 Rockville Pike
Bethesda, MD 20892

Dear Dr. Collins,

According to its mission statement, a goal of the National Institutes of Health (NIH) is "to exemplify . . .the highest level of scientific integrity and public accountability."[1] However, under your leadership, the NIH is falling short of that goal. On March 18, 2021, we sent NIH a detailed, eleven-page request for information about origins of the COVID-19 pandemic, which the public deserves to see. Three months later, the NIH has refused to cooperate with that request. The NIH has not provided a single document to us or made any document available to the public that responds directly to the paramount question of whether NIH funding played a role in risky research in China that could have started the pandemic.

We specifically requested documents related to National Institute of Allergy and Infectious Diseases (NIAID) grant R01AI110964, "Understanding the Risk of Bat Coronavirus Emergence" to EcoHealth Alliance that in part funded the Wuhan Institute of Virology (WIV) research into bat coronaviruses. The NIH has not provided the documents and did not provide written responses to any of the 29 questions in the March 18th letter. Instead, the NIH only provided a one-hour oral briefing to bipartisan committee staff with no documents to address any of the topics covered by the 29 questions in the March 18th letter. Additionally, no subject matter experts from the NIAID were included in the briefing, even though we specifically requested to hear from NIAID, which is the NIH institute responsible for issuing this grant. The only written response provided by the NIH was a two-page May 21, 2021, letter signed by NIH Principal Deputy Director Lawrence Tabak that did not address any of the questions in the March 18th letter, but instead stated:

[1] National Institutes of Health, *Mission and Goals*, What We Do (accessed July 14, 2021) *available at* https://www.nih.gov/about-nih/what-we-do/mission-goals.

> The application [from EcoHealth Alliance] was subjected to rigorous peer review and did not propose research to enhance any coronavirus to be more transmissible or virulent. The research proposed in the grant application sought to understand how bat coronaviruses evolve naturally in the environment to become transmissible to the human population. This included studying viral diversity in bat reservoirs, surveying people who work in live animal markets or other jobs with high exposure to wildlife for evidence of bat-coronavirus infection, and analyzing data to predict which newly discovered viruses pose the greatest threat to human health. To support its work, EcoHealth made sub-awards to the Wuhan Institute of Virology and other institutions based in East Asia where coronaviruses tend to emerge and are prevalent. NIH is not currently funding the Wuhan Institute of Virology.[2]

In addition, the NIH has denied supporting "gain-of-function" research at the WIV through this NIAID grant. For example, NIAID Director Dr. Anthony Fauci testified, "The NIH has not ever and does not now fund gain-of-function research in the Wuhan Institute of Virology."[3] You also stated: "Let me be very clear, we never approved any grant that would have supported gain of function research on dangerous coronaviruses to see if they could be more transmissible or lethal for individuals in the human species."[4] Yet, the NIH has declined to produce the underlying grant documents and records to substantiate these assertions. Importantly, the NIH has not provided complete information about exactly what the NIH did support at the WIV.

Based on published reports over the last few months and the NIH's June 28, 2021, briefing with bipartisan committee staff, we have reason to believe that the NIH may have funded humanized mice experiments at the WIV, and that such experiments may have had the potential to start the pandemic. This recent information seems contrary to NIH's characterizations of the EcoHealth grant and WIV research at issue.

Further, recent documents obtained under the Freedom of Information Act (FOIA) reveal that an NIAID official visited the WIV in 2017, and that NIAID had familiarity with the WIV research on bat coronaviruses and that some of these viruses could be transmissible to humans.

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[2] NIH did not identify by name the "other institutions based in East Asia where coronaviruses tend to emerge and are prevalent" in its letter. The only institution (singular) other than the WIV reported by EcoHealth Alliance as a sub-grant recipient for this grant is the Wuhan University, the same institution from which a researcher requested NIH to remove its submissions to the NIH Sequence Read Archive (SRA) database and NIH removed them. Dr. Jesse Bloom of the Fred Hutchinson Cancer Center recovered some of the removed sequence data and determined that the sequences related to the SARS CoV-2 early Chinese COVID-19 patients.

[3] Lori Robertson, *The Wuhan Lab and the Gain-of-Function Disagreement*, FactCheck.org (July 1, 2021) *available at* https://www factcheck.org/2021/05/the-wuhan-lab-and-the-gain-of-function-disagreement/./. We note collaborative projects between Dr. Ralph Baric of the University of North Carolina at Chapel Hill and the WIV, have produced research articles that describe Gain-of-Function research experiments when the WIV was technically funded through a USAID cooperative agreement facilitated by a consortium that included EcoHealth Alliance.

[4] Samuel Chamberlain, NIH head accuses Rand Paul of 'misinformation' about US ties to Wuhan lab New York Post (May 14, 2021) available at https://nypost.com/2021/05/14/nih-head-accuses-rand-paul-of-misinformation-about-us-ties-to-wuhan-lab/.

NIAID indirectly continued to fund the WIV research despite concerns about biosafety practices at the WIV raised in 2018 State Department cables, which were based in part on the NIAID visit in 2017.

First, we note that the FY 2018 abstract for the EcoHealth Alliance NIAID "Understanding the Risk of Bat Coronavirus Emergence" grant renewal openly discussed experiments with humanized mice. The abstract for the project declared that aim number three of the research project was to: "3. Test predictions of CoV inter-species transmission. Predictive models of host range (i.e. emergence potential) will be tested experimentally using reverse genetics, pseudovirus and receptor binding assays, and virus infection experiments across a range of cell cultures from different species and humanized mice." (emphasis added).[5] As noted by science writer Nicholas Wade, in such experiments, "laboratory mice, a cheap and ethical stand-in for human subjects, are genetically engineered to carry the human version of a protein called ACE2 that studs the surface of cells that line the airways."[6]

Second, a recent article in Vanity Fair reported that the WIV and its bat coronavirus research director, Dr. Shi Zhengli, were involved with experiments in humanized mice in recent years. The article stated that "Shi's own comments to a science journal, and grant information available on a Chinese government database, suggest that in the past three years her team has tested two novel but undisclosed bat coronaviruses on humanized mice, to gauge their infectiousness."[7]

Third, such experiments have pandemic potential. As the EcoHealth Alliance wrote in the FY 2019 abstract for this same NIH grant, "We will use S protein sequence data, infectious clone technology, in vitro and in vivo infection experiments and analysis of receptor binding to test the hypothesis that % divergence thresholds in S protein sequences predict spillover potential."[8] Mr. Wade further explained the implications of this research:

> What this means, in non-technical language, is that Shi set out to create novel coronaviruses with the highest possible infectivity for human cells. Her plan was to take genes that coded for spike proteins possessing a variety of measured affinities for human cells, ranging from high to low. She would insert these spike genes one by one into the backbone of a number of viral genomes ("reverse genetics" and "infectious clone technology"), creating a series of chimeric viruses. These chimeric viruses would then be tested for their ability to attack human cell cultures ("in vitro") and humanized mice ("in vivo"). And this information would help

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[5] Grantome NIH, Abstract for Understanding the Risk of Bat Coronavirus Emergence, EcoHealth Alliance Inc. FY 2018 available at https://grantome.com/grant/NIH/R01-AI110964-05.

[6] Nicholas Wade, *The origin of COVID: Did people or nature open Pandora's box at Wuhan?,* Bulletin of the Atomic Scientists, (May 5, 2021). *available at* https://thebulletin.org/2021/05/the-origin-of-covid-did-people-or-nature-open-pandoras-box-at-wuhan/.

[7] Katherine Eban, *The Lab Leak Theory: Inside the Fight to Uncover COVID 19's origins,* Vanity Fair (June 3, 2021), *available at* https://www.vanityfair.com/news/2021/06/the-lab-leak-theory-inside-the-fight-to-uncover-covid-19s-origins.

[8] Grantome NIH, Abstract for Understanding the Risk of Bat Coronavirus Emergence, EcoHealth Alliance Inc. FY 2019 available at https://grantome.com/grant/NIH/R01-AI110964-05.

> predict the likelihood of "spillover," the jump of a coronavirus from bats to people.
>
> The methodical approach was designed to find the best combination of coronavirus backbone and spike protein for infecting human cells. The approach could have generated SARS2-like viruses, and indeed may have created the SARS2 virus itself with the right combination of virus backbone and spike protein.[9]

From his review of WIV research, Dr. Richard Ebright, a molecular biologist and biosafety expert at Rutgers University, stated, "It is clear that the Wuhan Institute of Virology was systematically constructing novel chimeric coronaviruses and was assessing their ability to infect human cells and human-ACE2-expressing mice."[10] He further stated, "It is also clear that, depending on the constant genomic contexts chosen for analysis, this work could have produced SARS-CoV-2 or a proximal progenitor of SARS-CoV-2."[11]

Even Dr. Peter Daszak, the President of EcoHealth Alliance, noted the humanized mice and the risks of this research in a December 2019 interview.[12] Around minute 28 of the interview, Dr. Daszak stated:

> And we have now found, you know, after 6 or 7 years of doing this, over 100 new SARS-related coronaviruses, very close to SARS. Some of them get into human cells in the lab, some of them can cause SARS disease in humanized mice models and are untreatable with therapeutic monoclonals and you can't vaccinate against them with a vaccine. So, these are a clear and present danger….[13]

Likewise, Dr. Steven Quay noted the unique characteristic of efficient human-to-human transmission of SARS-CoV-2 in his testimony before the June 29, 2021, House Republican Forum that the SARS CoV-2 virus was "highly adapted for infection of humans from the start, unlike prior natural zoonoses. And growth in humanized mice would allow this lab [adaptation]," [14] like in a March 2020 published paper by Dr. Ralph Baric of University of North Carolina and Dr. Shi of the WIV.

Fourth, the NIH in the June 28, 2021, staff briefing acknowledged that the NIH-funded research at the WIV involved mice. One of the two NIH briefers, Dr. Tabak stated that the only animals that were used in this NIH-funded research at the WIV were mice. However, to date, the

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[9] Wade, note 5.
[10] *Id.*
[11] *Id.*
[12] Vincent Racaniello, *TWiV 615: Peter Daszak of EcoHealth Alliance - YouTube*, This Week in Virology, (May 19, 2020), *available at* https://www.youtube.com/watch?app=desktop&v=IdYDL_RK--w.
[13] *Id.*
[14] Led By Science: The COVID-19 Origin Story: Forum Before Select Subcomm. on the Coronavirus Crisis, H. Comm. on Oversight & Reform, 117th Cong. (June 29, 2021) (statement by Dr. Steven Quay).

NIH has not clarified to the Committee whether the mice used in the NIH-supported research were *humanized* mice.

Fifth, humanized mice have not been ruled out as an intermediate animal host. According to the World Health Organization joint study with China, more than 80,000 animal samples were tested with no positive results for either SARS CoV-2 antibodies or for the virus itself in an attempt to identify the intermediate animal host to support the zoonotic origins theory.[15] There is no evidence that any of these samples included samples of humanized mice at the WIV.

Finally, on October 26, 2017, Dr. Ping Chen, the Director of the NIAID office in China located in the U.S. embassy in Beijing, wrote to several NIAID officials stating that earlier in the week she had visited the P4 lab at the WIV and that her contact who helped arrange the visit was Dr. Zhengli Shi, "who is a Chinese collaborator on a NIAID grant to EcoHealth for SARS like corona virus project." [16]

Unfortunately, the rest of this email and the trip report were redacted. But, in an April 15, 2020, email sent to Gray Handley of the NIAID with the subject "FW: 2018 Cable" with the January 2018 State Department cable attached, Dr. Chen stated: "Rick forwarded the cable. I was listed as a drafter. About half of the content was taken from my summary."[17] The January 2018 State Department cable discussed the BSL-4 lab at the WIV, China investing in infectious disease control, unclear guidelines on virus access, the lack of trained talent impeding research, and despite limitations, WIV researchers produce SARS discoveries. For the last topic, the cable noted the WIV research finding "strongly suggests that SARS-like coronaviruses from bats can be transmitted to humans to cause SARS-like disease."[18] These redacted documents provide a reason to believe that the NIH – or at least the NIAID – had a much higher level of engagement and familiarity with the EcoHealth Alliance grant and WIV bat coronavirus research than just reading press reports during April-July 2020 as NIH suggested at the June 28, 2021, briefing with bipartisan Committee staff.[19]

Over 600,000 Americans have died from COVID-19 and more than 4 million people worldwide. We need answers to some basic questions about the origin of the virus, and yet, the NIH continues to frustrate our efforts to get answers. The stakes are too high to operate on an

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[15] World Health Organization, *WHO-convened Global Study of the Origins of SARS-CoV-2* (March 30, 2021) *available at* https://www.who.int/health-topics/coronavirus/origins-of-the-virus.

[16] Judicial Watch, *Judicial Watch: New Documents Show Wuhan Lab Asked NIH Official for Information on Disinfectants; Nine Fauci Agency Grants for EcoHealth Bat Coronavirus Research*, Press Releases (July 8, 2021) *available at* https://www.judicialwatch.org/press-releases/wuhan-lab-fauci-grants/.

[17] *Id.*

[18] Josh Rogin, *Opinion: State Department cables warned of safety issues at Wuhan lab studying bat coronaviruses*, The Washington Post (April 14, 2020) *available at* https://www.washingtonpost.com/opinions/2020/04/14/state-department-cables-warned-safety-issues-wuhan-lab-studying-bat-coronaviruses/.

[19] Based on the questions the NIH Office of Extramural Research asked EcoHealth Alliance, it is unclear that NIH maintained control, oversight or responsibility of EcoHealth Alliance as its grantee. For example, in an April 2020 email to EcoHealth Alliance, the NIH Deputy Director of Extramural Research, Dr. Michael Lauer, asked EcoHealth Alliance for information about this same grant, to include, "…**it would be helpful for us to know about *all* China-based participants in this work since the Type 1 grant started in 2014 - who they were and how much money they received."**

honor system. This not only undermines NIH's mission goals, but also Congress' and the public's trust in the NIH. It is time for the NIH to share all information and documents that it has related to NIAID grant R01AI110964 with the public and the scientific community.

Therefore, we request that the NIH provide all documents related to the October 2017 visit to the WIV, all documents related to NIAID grant R01AI110964, and the identities of the "other institutions" referenced in NIH's May letter by July 28, 2021. In addition, we request staff briefings immediately and no later than July 28, 2021, with the following officials from NIAID: Dr. Ping Chen and Dr. Erik Stemmy, the program officer for NIAID grant R01AI110964.

If you have any questions, please contact Alan Slobodin or Diane Cutler of the Minority Committee staff.

Sincerely,

Cathy McMorris Rodgers
Republican Leader
Committee on Energy and Commerce

Brett Guthrie
Republican Leader
Subcommittee on Health

H. Morgan Griffith
Republican Leader
Subcommittee on Oversight and Investigations

CC: The Honorable Frank Pallone, Chairman
The Honorable Anna Eshoo, Chair, Subcommittee on Health
The Honorable Diana DeGette, Chair, Subcommittee on Oversight and Investigations

EXHIBIT 33

EXHIBIT 33

CERTIFICATION OF VITAL RECORD

DEPARTMENT OF STATE HEALTH SERVICES
VITAL STATISTICS

TEXAS DEPARTMENT OF STATE HEALTH SERVICES - VITAL STATISTICS
Dec 10 2020

STATE OF TEXAS — **CERTIFICATE OF DEATH** — **STATE FILE NUMBER** 142-20-224265

TEXAS DEPARTMENT OF STATE HEALTH SERVICES - VITAL STATISTICS UNIT

1. LEGAL NAME OF DECEASED (Include AKA's, if any) (First, Middle, Last)			(Before Marriage)	2. DATE OF DEATH - ACTUAL OR PRESUMED (mm-dd-yyyy)	
PATRICIA	MARIE	CADDOO	GAARDER	DECEMBER 9, 2020	
3. SEX	4. DATE OF BIRTH (mm-dd-yyyy)	5. AGE-Last Birthday (Years)	IF UNDER 1 YR: Mo / Days	IF UNDER 1 DAY: Hours / Min	6. BIRTHPLACE (City & State or Foreign Country)
FEMALE	MAY 22, 1935	85			YONKERS, NY

7. SOCIAL SECURITY NUMBER: [redacted]

8. MARITAL STATUS AT TIME OF DEATH: ☐ Married ☒ Widowed (but not remarried) ☐ Divorced (but not remarried) ☐ Never Married ☐ Unknown

9. SURVIVING SPOUSE'S NAME (If spouse, give name prior to first marriage)

10a. RESIDENCE STREET ADDRESS	10b. APT. NO.	10c. CITY OR TOWN
2043 BISCAYNE DRIVE		LEWISVILLE

10d. COUNTY	10e. STATE	10f. ZIP CODE	10g. INSIDE CITY LIMITS?
DENTON	TEXAS	75067-7420	☒ Yes ☐ No

11. FATHER/PARENT 2 NAME PRIOR TO FIRST MARRIAGE	12. MOTHER/PARENT 1 NAME PRIOR TO FIRST MARRIAGE
OSCAR EARL GAARDER	CARMELLA DENICOLA

13. PLACE OF DEATH (CHECK ONLY ONE)

IF DEATH OCCURRED IN A HOSPITAL: ☐ Inpatient ☐ ER/Outpatient ☐ DOA
IF DEATH OCCURRED SOMEWHERE OTHER THAN A HOSPITAL: ☐ Hospice Facility ☒ Nursing Home ☐ Decedent's Home ☐ Other (Specify)

14. COUNTY OF DEATH	15. CITY/TOWN, ZIP (IF OUTSIDE CITY LIMITS, GIVE PRECINCT NO)	16. FACILITY NAME (If not institution, give street address)
DENTON	LEWISVILLE, 75067	INSPIRED LIVING OF LEWISVILLE

17. INFORMANT'S NAME & RELATIONSHIP TO DECEASED	18. MAILING ADDRESS OF INFORMANT (Street and Number,City,State,Zip Code)
DAVID ANDREW CADDOO - SON	2043 BISCAYNE DRIVE, LEWISVILLE, TX 75067-7420

19. METHOD OF DISPOSITION	20. SIGNATURE AND LICENSE NUMBER OF FUNERAL DIRECTOR OR PERSON ACTING AS SUCH	21. ☒ Unknown
☐ Burial ☒ Cremation ☐ Donation ☐ Entombment ☐ Removal from state ☐ Mausoleum ☐ Other (Specify)	BRADLEY SUTTON,BY ELECTRONIC SIGNATURE - 11079	Section / Block / Lot / Space

22. PLACE OF DISPOSITION (Name of cemetery, crematory, other place)	23. LOCATION (City/Town, and State)
METRO MORTUARY AND CREMATORY	SACHSE, TX

24. NAME OF FUNERAL FACILITY	25. COMPLETE ADDRESS OF FUNERAL FACILITY (Street and Number, City, State, Zip Code)
DALTON AND SON FUNERAL HOME	1550 N STEMMONS FRWY, LEWISVILLE, TX 75067

26. CERTIFIER (Check only one)
☒ Certifying physician-To the best of my knowledge, death occurred due to the cause(s) and manner stated.
☐ Medical Examiner/Justice of the Peace - On the basis of examination, and/or investigation, in my opinion, death occurred at the time,date and place, and due to the cause(s) and manner stated.

27.SIGNATURE OF CERTIFIER	28. DATE CERTIFIED (mm-dd-yyyy)	29. LICENSE NUMBER	30. TIME OF DEATH(Actual or presumed)
ROSALINE SHARIFI , BY ELECTRONIC SIGNATURE	DECEMBER 9, 2020	N6656	01:30 PM

31. PRINTED NAME, ADDRESS OF CERTIFIER (Street and Number, City,State,Zip Code)	32. TITLE OF CERTIFIER
ROSALINE SHARIFI 800 W. RANDOL MILL RD, ARLINGTON, TX 76012	DO

WARNING
The penalty for knowingly making a false statement in this form can be 2-10 years in prison and a fine up to $10,000. (Health and Safety Code, Sec. 195, 1969)

CAUSE OF DEATH

33. PART 1. ENTER THE CHAIN OF EVENTS - DISEASES, INJURIES, OR COMPLICATIONS - THAT DIRECTLY CAUSED THE DEATH. DO NOT ENTER TERMINAL EVENTS SUCH AS CARDIAC ARREST, RESPIRATORY ARREST, OR VENTRICULAR FIBRILLATION WITHOUT SHOWING THE ETIOLOGY. DO NOT ABBREVIATE. ENTER ONLY ONE CAUSE ON EACH.

		Approximate interval Onset to death
IMMEDIATE CAUSE (Final disease or condition -----> resulting in death)	a. COVID 19 PNEUMONIA	DAYS
Due to (or as a consequence of):		
Sequentially list conditions, if any, leading to the cause listed on line a. Enter the UNDERLYING CAUSE (disease or injury that initiated, the events resulting in death) LAST	b. COVID 19 VIRUS	WEEK
Due to (or as a consequence of):		
	c.	
Due to (or as a consequence of):		
	d.	

PART 2. ENTER OTHER CAUSE GIVEN IN PART I — SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RESULTING IN THE UNDERLYING

DIABETES MELLITUS, DEMENTIA, HISTORY BREAST CANCER

34. WAS AN AUTOPSY PERFORMED? ☐ Yes ☒ No

35. WERE AUTOPSY FINDINGS AVAILABLE TO COMPLETE THE CAUSE OF DEATH? ☐ Yes ☐ No

36. MANNER OF DEATH	37. DID TOBACCO USE CONTRIBUTE TO DEATH?	38. IF FEMALE:	39. IF TRANSPORTATION INJURY, SPECIFY:
☒ Natural	☐ Yes	☐ Not pregnant within past year	☐ Driver/Operator
☐ Accident	☒ No	☐ Pregnant at time of death	☐ Passenger
☐ Suicide	☐ Previously	☐ Not pregnant, but pregnant within 42 days of death	☐ Pedestrian
☐ Homicide	☐ Probably	☐ Not pregnant, but pregnant 43 days to one year before death	☐ Other (Specify)
☐ Pending Investigation	☐ Unknown	☐ Unknown if pregnant within the past year	
☐ Could not be determined			

40a. DATE OF INJURY(mm-dd-yyyy)	40b. TIME OF INJURY	40c. INJURY AT WORK?	40d. PLACE OF INJURY (e.g, Decedent's home, construction site, restaurant, wooded area)
		☐ Yes ☐ No	

40e. LOCATION (Street and Number, City,State,Zip Code)	40f. COUNTY OF INJURY

41. DESCRIBE HOW INJURY OCCURRED

42a. REGISTRAR FILE NO.	42b. DATE RECEIVED BY LOCAL REGISTRAR	42c. REGISTRAR

VS-112 REV 1/2006

JON

EDR NUMBER 000044444895193

This is a true and correct copy of the record as registered in the State of Texas. Issued under the authority of Section 191.051, Health and Safety Code.

ISSUED Dec 16 2020

TARA DAS
STATE REGISTRAR

WARNING: THIS DOCUMENT HAS A DARK BLUE BORDER AND A COLORED BACKGROUND

ANY ALTERATION OR ERASURE VOIDS THIS CERTIFICATE

THE STATE OF TEXAS

DEPARTMENT OF STATE HEALTH SERVICES VITAL STATISTICS

EXHIBIT 34

EXHIBIT 34

Family Members-Surviving Spouse's Middle Name- amended on Dec-15-2021; formerly blank; , Family Members-Last(Enter birth name of spouse if married or separated)- amended on Dec-15-2021, formerly Smith; , Family Members-Mother's Maiden Last Name- amended on Dec-15-2021; formerly Watinski; , Informant-Middle Name- amended on Dec-15-2021; formerly Smith, Amended on Mar-10-2022 - Cause of Death-Line D Description was CHRONIC OBSTRUCTIVE PULMONARY DISEASE

2950

03851

NEW YORK STATE
DEPARTMENT OF HEALTH

CERTIFICATE OF DEATH

131-2021-00108201
STATE FILE NUMBER

DECEDENT

1. NAME: FIRST Robert; MIDDLE; LAST Sendzischew
2. SEX: Male
3A. DATE OF DEATH: MONTH 12; DAY 13; YEAR 2021
3B. HOUR: Approx 07:29 PM
4A. PLACE OF DEATH (Check one): [X] Nursing Home
4B. IF FACILITY (Enter name): MONTH 09; DAY 30; YEAR 2021
4C. NAME OF FACILITY: The Five Towns Premier Rehabilitation & Nursing Center
4D. LOCALITY (Check one and specify): [X] TOWN Hempstead Town
4E. COUNTY OF DEATH: Nassau
5. MEDICAL RECORD NO.
6A. WAS DECEDENT TRANSFERRED FROM ANOTHER INSTITUTION?: [X] YES — Mount Sinai South Nassau, Hempstead Town, Nassau, New York
7. DATE OF BIRTH: MONTH 11; DAY 07; YEAR 1973
8A. AGE IN YEARS: 48
8B. IF UNDER 1 YEAR ENTER: months; days
8C. IF UNDER 1 DAY ENTER: hours; minutes
9A. CITY AND STATE OF BIRTH (If not USA, Country and Region/Province): Brooklyn Borough, New York
9B. IF AGE UNDER 1 YEAR, NAME OF HOSPITAL OF BIRTH
10. DECEDENT EVER IN U.S. ARMED FORCES?: [X] NO
11. DECEDENT OF HISPANIC ORIGIN?: [X] A. No, not Spanish/Hispanic/Latino
12. DECEDENT'S RACE: [X] A. White/Caucasian
13. DECEDENT'S EDUCATION: [X] 7. Master's degree
14. SOCIAL SECURITY NUMBER: [redacted]
15. MARITAL STATUS: [X] 2. MARRIED
16. SURVIVING SPOUSE (Enter birth name of spouse if married or separated): Melanie Ruth Katz
17A. USUAL OCCUPATION (Do not enter retired): Accountant
17B. KIND OF BUSINESS OR INDUSTRY: Accounting
17C. NAME AND LOCALITY OF COMPANY OR FIRM
18A. RESIDENCE (State or Country if not USA): NY
18B. County or Region/Province if not USA: Nassau
18C. LOCALITY (Check one and specify): [X] TOWN Woodmere Hamlet
18F. IF CITY OR VILLAGE, IS RESIDENCE WITHIN CITY OR VILLAGE LIMITS?: [ ] YES [ ] NO — IF NO, SPECIFY TOWN:
18D. STREET AND NUMBER OF RESIDENCE: 1024 Westwood Road
18E. ZIP CODE: 11598
19. BIRTH NAME OF FATHER / PARENT: FIRST Israel; MI Jacob; LAST Sendzischew
20. BIRTH NAME OF MOTHER / PARENT: FIRST Fran; MI; LAST Watynski

INFORMANT

21A. NAME OF INFORMANT: Melanie Ruth Katz Sendzischew
21B. MAILING ADDRESS (Include zip code): 1024 Westwood Rd, Woodbourne Hamlet, NY 11598

DISPOSITION

22A. 1 [X] BURIAL 2 [ ] CREMATION 3 [ ] REMOVAL 4 [ ] HOLD 5 [ ] DONATION 6 [ ] ENTOMBMENT — MONTH 12; DAY 14; YEAR 2021
22B. PLACE OF BURIAL, CREMATION, REMOVAL OR OTHER DISPOSITION: Beth Israel Memorial Park
22C. LOCATION (City or town and state): Woodbridge, New Jersey
23A. NAME AND ADDRESS OF FUNERAL HOME: Yereim Orthodox Chapel
93 Broadway, Brooklyn, NY 11211
23B. REGISTRATION NUMBER: 01849
24A. NAME OF FUNERAL DIRECTOR: George L Kranz
24B. SIGNATURE OF FUNERAL DIRECTOR: George L Kranz Electronically Signed
24C. REGISTRATION NUMBER: 11943
25A. SIGNATURE OF REGISTRAR: Kathleen Murray Electronically Signed
25B. DATE FILED: MONTH 12; DAY 14; YEAR 2021
25A. BURIAL OR REMOVAL PERMIT ISSUED BY: Kathleen Murray
25B. DATE (ISSUED): MONTH 12; DAY 14; YEAR 2021

CERTIFIER

ITEMS 25 THRU 33 COMPLETED BY CERTIFYING PHYSICIAN -- OR -- CORONER/CORONER'S PHYSICIAN OR MEDICAL EXAMINER

25A. CERTIFICATION: To the best of my knowledge, death occurred at the time, date and place and due to the causes stated.
Certifier's Name: Kolawole Ademuyiwa Odulaja, MD
License No.: 219745
Signature: Kolawole Ademuyiwa Odulaja, MD Electronically Signed
Month 12; Day 13; Year 2021
Certifier's Title: 0 [X] Attending Physician 0 [ ] Physician acting on behalf of Attending Physician 1 [ ] Coroner 2 [ ] Medical Examiner / Deputy Medical Examiner
Address: 1050 Central Avenue, Hempstead Town, NY 11598
25B. If coroner is not a physician, enter Coroner's Physician's name & title:
License No.:
Signature:
Month; Day; Year
25C. If certifier is not attending physician, enter Attending Physician's name & title:
License No.:
Address:
26A. Attending physician attended deceased: FROM Month 09; Day 30; Year 2021 TO Month 12; Day 13; Year 2021
26B. Deceased last seen alive by attending physician: Month 12; Day 13; Year 2021
26C. Pronounced Dead: ON Month 12; Day 13; Year 2021 AT Time 07:29 PM
27. MANNER OF DEATH: [X] 1 NATURAL CAUSE [ ] 2 ACCIDENT [ ] 3 HOMICIDE [ ] 4 SUICIDE [ ] 5 UNDETERMINED/CIRCUMSTANCES [ ] 6 PENDING INVESTIGATION
28. WAS CASE REFERRED TO CORONER OR MEDICAL EXAMINER? 0 [X] NO 1 [ ] YES
29A. AUTOPSY? NO [X] 0 YES [ ] 1 REFUSED [ ] 2
29B. IF YES, WERE FINDINGS USED TO DETERMINE CAUSE OF DEATH? 0 [ ] NO 1 [ ] YES

CONFIDENTIAL — SEE INSTRUCTION SHEET FOR COMPLETING CAUSE OF DEATH — CONFIDENTIAL

CAUSE OF DEATH

30. DEATH WAS CAUSED BY (ENTER ONLY ONE CAUSE PER LINE FOR (A), (B), AND (C).) — APPROXIMATE INTERVAL BETWEEN ONSET AND DEATH

PART I. IMMEDIATE CAUSE
(A) CARDIORESPIRATOY ARREST — 1 DAY
DUE TO OR AS A CONSEQUENCE OF
(B) ATHEROSCLEROSIS HEART DISEASE — UNKNOWN
DUE TO OR AS A CONSEQUENCE OF:
(C) HYPERTENSION (D) CHRONIC OBSTRUCTIVE PULMONARY DISEASE, COVID - 19 VIRAL INFECTION — UNKNOWN, (D) UNKNOWN

PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO CAUSE GIVEN IN PART I (A): <<<>>>
DID TOBACCO USE CONTRIBUTE TO DEATH? 0 [X] NO 1 [ ] YES 2 [ ] PROBABLY 3 [ ] UNKNOWN

31A. IF INJURY: DATE (MONTH; DAY; YEAR); HOUR
31B. INJURY LOCALITY (City or town and county and state)
31C. DESCRIBE HOW INJURY OCCURRED
31D. PLACE OF INJURY
31E. INJURY AT WORK? NO [ ] 0 YES [ ] 1
31F. IF TRANSPORTATION INJURY, SPECIFY: 1 [ ] Driver/Operator 2 [ ] Passenger 3 [ ] Pedestrian 4 [ ] OTHER (specify)
32. WAS DECEDENT HOSPITALIZED IN LAST 2 MONTHS? NO [ ] 0 YES [X] 1
33A. IF FEMALE: 0 [ ] Not pregnant within last year 1 [ ] Pregnant at time of death 2 [ ] Not pregnant, but pregnant within 42 days of death 3 [ ] Not pregnant, but pregnant 43 days to 1 year before death 4 [ ] Unknown if pregnant within past year
33B. DATE OF DELIVERY: MONTH; DAY; YEAR

NY3520440

Ver. 09/2020

This is to certify that the within copy has been compared by me with the original thereof on file in the Bureau of Vital Records, New York State Department of Health, Albany, NY and that it is a correct copy of the original record and of the whole thereof.

Stephanie E. Ostrowski

New York State Registrar
Stephanie E. Ostrowski

JUL 27 2022

N. B. Do not accept this copy unless the raised seal of the New York State Department of Health is affixed, thereon.
Albany, New York

EXHIBIT 35

EXHIBIT 35

DOH-1961 (8/2011)

RECORDED DISTRICT 4401

REGISTER NUMBER 0269

NEW YORK STATE
DEPARTMENT OF HEALTH

CERTIFICATE OF DEATH

131-2022-00005246
STATE FILE NUMBER

DECEDENT

1. NAME: FIRST Robert | MIDDLE F | LAST Lewis Jr.

2. SEX: MALE [X] 1 FEMALE [ ] 2

3A. DATE OF DEATH: MONTH 01 DAY 15 YEAR 2022

3B. HOUR: Approx 07:30 PM

4A. PLACE OF DEATH (Check one): HOSPITAL DOA [ ] HOSPITAL ER [ ] HOSPITAL OUTPATIENT [ ] HOSPITAL INPATIENT [X] NURSING HOME [ ] PRIVATE RESIDENCE [ ] HOSPICE FACILITY [ ] OTHER (Specify): [ ]

4B. IF FACILITY, DATE ADMITTED: MONTH 12 DAY 28 YEAR 2021

4C. NAME OF FACILITY (If facility, give address): Mercy Hospital

4D. LOCALITY (Check one and specify): CITY [ ] VILLAGE [ ] TOWN [ ] Buffalo

4E. COUNTY OF DEATH: Erie

4F. MEDICAL RECORD NO.:

4G. WAS DECEDENT TRANSFERRED FROM ANOTHER INSTITUTION? (If yes, specify institution name, city or town, county and state): NO [ ] YES [ ]

5. DATE OF BIRTH: MONTH 04 DAY 24 YEAR 1961

6A. AGE IN YEARS: 60 yrs.

6B. IF UNDER 1 YEAR ENTER: months days

6C. IF UNDER 1 DAY ENTER: hours minutes

7A. CITY AND STATE OF BIRTH (If not USA, Country and Region/Province): Baltimore, Maryland

7B. IF AGE UNDER 1 YEAR, NAME OF HOSPITAL OF BIRTH:

8. SERVED IN U.S. ARMED FORCES? (Specify years) NO [X] 0 YES [ ] 1

9. DECEDENT OF HISPANIC ORIGIN? Check the boxes that best describe whether the decedent is Spanish/Hispanic/Latino.
A [X] No, not Spanish/Hispanic/Latino B [ ] Yes, Mexican, Mexican American, Chicano
C [ ] Yes, Puerto Rican D [ ] Yes, Cuban
E [ ] Yes, Other Spanish/Hispanic/Latino (Specify)

10. DECEDENT'S RACE: Check one or more races to indicate what the decedent considered himself or herself to be:
A [X] White/Caucasian B [ ] Black or African American C [ ] Asian Indian D [ ] Chinese
E [ ] Filipino F [ ] Japanese G [ ] Korean H [ ] Vietnamese
J [ ] Native Hawaiian K [ ] Guamanian or Chamorro M [ ] Samoan
N [ ] American Indian or Alaska Native (specify)
P [ ] Other Asian (specify) R [ ] Other Pacific Islander (specify)
S [ ] Other (specify)

11. DECEDENT'S EDUCATION: Check the box that best describes the highest degree or level of school completed at the time of death.
1 [ ] ≤ 8th grade 2 [ ] 9th-12th grade; no diploma 3 [ ] High school graduate or GED
4 [ ] Some college credit, but no degree 5 [ ] Associate's degree 6 [X] Bachelor's degree
7 [ ] Master's degree 8 [ ] Doctorate/Professional degree

12. SOCIAL SECURITY NUMBER: [redacted]

13. MARITAL STATUS: NEVER MARRIED [ ] 1 MARRIED [X] 2 WIDOWED [ ] 3 DIVORCED [ ] 4 SEPARATED [ ] 5

14. SURVIVING SPOUSE: Enter birth name of spouse if married or separated. Kimberly Lewis

15A. USUAL OCCUPATION (Do not enter retired): Computer Programmer

15B. KIND OF BUSINESS OR INDUSTRY: Hospital Supplies

15C. NAME AND LOCALITY OF COMPANY OR FIRM: Buffalo Hospital Supply - Buffalo, NY

16A. RESIDENCE (State or Country if not USA): NY

16B. County or Region/Province if not USA: Erie

16C. LOCALITY (Check one and specify): CITY [ ] VILLAGE [ ] TOWN [ ] Alden Village

16F. IF CITY OR VILLAGE, IS RESIDENCE WITHIN CITY OR VILLAGE LIMITS? YES [ ] NO [ ] IF NO, SPECIFY TOWN:

16D. STREET AND NUMBER OF RESIDENCE: 13014 Broadway

16E. ZIP CODE: 14004

PARENTS

17. BIRTH NAME OF FATHER / PARENT: FIRST Robert MI L LAST Lewis Sr.

18. BIRTH NAME OF MOTHER / PARENT: FIRST Dorothy MI G LAST Gebhart

19A. NAME OF INFORMANT: Kimkberly Lewis

19B. MAILING ADDRESS (include zip code): 13014 Broadway, Alden Village, NY 14004

DISPOSITION

20A. 1 [ ] BURIAL 2 [X] CREMATION 3 [ ] REMOVAL 4 [ ] HOLD 5 [ ] DONATION 6 [ ] ENTOMBMENT
MONTH 01 DAY 18 YEAR 2022

20B. PLACE OF BURIAL, CREMATION, REMOVAL OR OTHER DISPOSITION: Cutler Cremation Co

20C. LOCATION (City or town and state): Buffalo, New York

21A. NAME AND ADDRESS OF FUNERAL HOME: Charles Meyer Funeral Home, 13228 Broadway, Alden, NY 14004

21B. REGISTRATION NUMBER: 00316

22A. NAME OF FUNERAL DIRECTOR: Tracey L Golding

22B. SIGNATURE OF FUNERAL DIRECTOR: ▶ Tracey L Golding Electronically Signed

22C. REGISTRATION NUMBER: 11378

23A. SIGNATURE OF REGISTRAR: ▶ Tianna M Marks Electronically Signed

23B. DATE FILED: MONTH 01 DAY 18 YEAR 2022

24A. BURIAL OR REMOVAL PERMIT ISSUED BY: Dwyane Buchanan

24B. DATE ISSUED: MONTH 01 DAY 18 YEAR 2022

CERTIFIER

ITEMS 25 THRU 33 COMPLETED BY CERTIFYING PHYSICIAN -- OR -- CORONER/CORONER'S PHYSICIAN OR MEDICAL EXAMINER

25A. CERTIFICATION: To the best of my knowledge, death occurred at the time, date and place and due to the causes stated.
Certifier's Name: Chelsea Lynn Stoeckl, PA
License No.: 019649
Signature: Chelsea Lynn Stoeckl, PA ▶ Electronically Signed
Month 01 Day 16 Year 2022

Certifier's Title: 0 [ ] Attending Physician 0 [ ] Physician acting on behalf of Attending Physician 1 [ ] Coroner 2 [ ] Medical Examiner / Deputy Medical Examiner
Address: 565 Abbott Road, Buffalo, NY 14220

25B. If coroner is not a physician, enter Coroner's Physician's name & title:
License No.:
Signature: ▶
Month Day Year

25C. If certifier is not attending physician, enter Attending Physician's name & title:
License No.:
Address:

26A. Attending physician attended deceased: FROM Month 12 Day 28 Year 2021 TO Month 01 Day 12 Year 2022

26B. Deceased last seen alive by attending physician: Month 01 Day 12 Year 2022

26C. Pronounced Dead ON Month 01 Day 15 Year 2022 AT Time 07:30 PM

27. MANNER OF DEATH: NATURAL CAUSE [X] 1 ACCIDENT [ ] 2 HOMICIDE [ ] 3 SUICIDE [ ] 4 UNDETERMINED CIRCUMSTANCES [ ] 5 PENDING INVESTIGATION [ ] 6

28. WAS CASE REFERRED TO CORONER OR MEDICAL EXAMINER? 0 [X] NO 1 [ ] YES

29A. AUTOPSY? NO [X] 0 YES [ ] 1 REFUSED [ ] 2

29B. IF YES, WERE FINDINGS USED TO DETERMINE CAUSE OF DEATH? 0 [ ] NO 1 [ ] YES

CONFIDENTIAL — SEE INSTRUCTION SHEET FOR COMPLETING CAUSE OF DEATH — CONFIDENTIAL

CAUSE OF DEATH

30. DEATH WAS CAUSED BY: (ENTER ONLY ONE CAUSE PER LINE FOR (A), (B), AND (C).)

	APPROXIMATE INTERVAL BETWEEN ONSET AND DEATH
PART I. IMMEDIATE CAUSE: (A) COVID-19	25 days
DUE TO OR AS A CONSEQUENCE OF: (B) Acute Respiratory Failure with Hypoxia	18 days
DUE TO OR AS A CONSEQUENCE OF: (C) Deep Vein Thrombosis	17 days

PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO CAUSE GIVEN IN PART I (A): <<<>>>

DID TOBACCO USE CONTRIBUTE TO DEATH? 0 [X] NO 1 [ ] YES 2 [ ] PROBABLY 3 [ ] UNKNOWN

31A. IF INJURY, DATE: MONTH DAY YEAR HOUR:

31B. INJURY LOCALITY: (City or town and county and state)

31C. DESCRIBE HOW INJURY OCCURRED:

31D. PLACE OF INJURY:

31E. INJURY AT WORK? NO [ ] 0 YES [ ] 1

31F. IF TRANSPORTATION INJURY, SPECIFY: 1 [ ] Driver/Operator 2 [ ] Passenger 3 [ ] Pedestrian 4 [ ] OTHER (specify)

32. WAS DECEDENT HOSPITALIZED IN LAST 2 MONTHS? NO [ ] 0 YES [ ] 1

33A. IF FEMALE: 0 [ ] Not pregnant within last year 1 [ ] Pregnant at time of death 2 [ ] Not pregnant, but pregnant within 42 days of death 3 [ ] Not pregnant, but pregnant 43 days to 1 year before death 4 [ ] Unknown if pregnant within past year

33B. DATE OF DELIVERY: MONTH DAY YEAR

EXHIBIT 36

EXHIBIT 36

DOH-1951 (8/2017)

RECORDED DISTRICT 1401
REGISTER NUMBER 5443

NEW YORK STATE
DEPARTMENT OF HEALTH

CERTIFICATE OF DEATH

131-2021-00110717
STATE FILE NUMBER

DECEDENT

1. NAME: FIRST MIDDLE LAST: Patricia A Chislett
2. SEX: MALE ☐ 1 FEMALE ☒ 2
3A. DATE OF DEATH: MONTH 12 DAY 18 YEAR 2021
3B. HOUR: 10:20 AM
4A. PLACE OF DEATH (Check one): HOSPITAL DOA ☐ ER ☐ HOSPITAL OUTPATIENT ☐ HOSPITAL INPATIENT ☒ NURSING HOME ☐ PRIVATE RESIDENCE ☐ HOSPICE FACILITY ☐ OTHER (Specify) ☐
4B. IF FACILITY, DATE ADMITTED: MONTH 12 DAY 18 YEAR 2021
4C. NAME OF FACILITY (If not facility, give address): Sisters Of Charity Hospital
4D. LOCALITY (Check one and specify): CITY ☐ VILLAGE ☐ TOWN ☐ Buffalo
4E. COUNTY OF DEATH: Erie
4F. MEDICAL RECORD NO.: 285159846
4G. WAS DECEDENT TRANSFERRED FROM ANOTHER INSTITUTION? (If yes, specify institution name, city or town, county and state): NO ☐ YES ☐
5. DATE OF BIRTH: MONTH 06 DAY 11 YEAR 1946
6A. AGE IN YEARS: 75 yrs.
6B. IF UNDER 1 YEAR ENTER: months days
6C. IF UNDER 1 DAY ENTER: hours minutes
7A. CITY AND STATE OF BIRTH (If not USA, Country and Region/Province): Buffalo, New York
7B. IF AGE UNDER 1 YEAR, NAME OF HOSPITAL OF BIRTH:
8. SERVED IN U.S. ARMED FORCES? (Specify years): NO ☒ 0 YES ☐ 1
9. DECEDENT OF HISPANIC ORIGIN? Check the boxes that best describe whether the decedent is Spanish/Hispanic/Latino.
A ☒ No, not Spanish/Hispanic/Latino B ☐ Yes, Mexican, Mexican American, Chicano
C ☐ Yes, Puerto Rican D ☐ Yes, Cuban
E ☐ Yes, Other Spanish/Hispanic/Latino (Specify)
10. DECEDENT'S RACE: Check one or more races to indicate what the decedent considered himself or herself to be:
A ☒ White/Caucasian B ☐ Black or African American C ☐ Asian Indian D ☐ Chinese
E ☐ Filipino F ☐ Japanese G ☐ Korean H ☐ Vietnamese
J ☐ Native Hawaiian K ☐ Guamanian or Chamorro M ☐ Samoan
N ☐ American Indian or Alaska Native (specify)
P ☐ Other Asian (specify) R ☐ Other Pacific Islander (specify)
S ☐ Other (specify)
11. DECEDENT'S EDUCATION: Check the box that best describes the highest degree or level of school completed at the time of death.
1 ☐ ≤ 8th grade 2 ☐ 9th-12th grade; no diploma 3 ☒ High school graduate or GED
4 ☐ Some college credit, but no degree 5 ☐ Associate's degree 6 ☐ Bachelor's degree
7 ☐ Master's degree 8 ☐ Doctorate/Professional degree
12. SOCIAL SECURITY NUMBER: [redacted]
13. MARITAL STATUS: NEVER MARRIED ☐ 1 MARRIED ☒ 2 WIDOWED ☐ 3 DIVORCED ☐ 4 SEPARATED ☐ 5
14. SURVIVING SPOUSE: Enter birth name of spouse if married or separated. James A Chislett
15A. USUAL OCCUPATION (Do not enter retired): home maker
15B. KIND OF BUSINESS OR INDUSTRY: own home
15C. NAME AND LOCALITY OF COMPANY OR FIRM:
16A. RESIDENCE (State or Country if not USA): NY
16B. County or Region/Province if not USA: Erie
16C. LOCALITY (Check one and specify): CITY ☐ VILLAGE ☐ TOWN ☐ Elma Town
16F. IF CITY OR VILLAGE, IS RESIDENCE WITHIN CITY OR VILLAGE LIMITS? ☐ YES ☐ NO IF NO, SPECIFY TOWN:
16D. STREET AND NUMBER OF RESIDENCE: 3680 Bullis Road
16E. ZIP CODE: 14059

FAMILY

17. BIRTH NAME OF FATHER / PARENT: FIRST MI LAST: E. William Carey
18. BIRTH NAME OF MOTHER / PARENT: FIRST MI LAST: Evelyn Mangus
19A. NAME OF INFORMANT: James A Chislett
19B. MAILING ADDRESS (include zip code): 3680 Bullis Road, Elma Town, NY 14059

DISPOSITION

20A. 1 ☐ BURIAL 2 ☒ CREMATION 3 ☐ REMOVAL 4 ☐ HOLD 5 ☐ DONATION 6 ☐ ENTOMBMENT — MONTH 12 DAY 29 YEAR 2021
20B. PLACE OF BURIAL, CREMATION, REMOVAL OR OTHER DISPOSITION: Cutler Cremation Co
20C. LOCATION (City or town and state): Buffalo, New York
21A. NAME AND ADDRESS OF FUNERAL HOME: Charles Meyer Funeral Home, 13228 Broadway, Alden, NY 14004
21B. REGISTRATION NUMBER: 00316
22A. NAME OF FUNERAL DIRECTOR: Tracey L Golding
22B. SIGNATURE OF FUNERAL DIRECTOR: Tracey L Golding Electronically Signed
22C. REGISTRATION NUMBER: 11378
23A. SIGNATURE OF REGISTRAR: Tianna M Marks Electronically Signed
23B. DATE FILED: MONTH 12 DAY 21 YEAR 2021
24A. BURIAL OR REMOVAL PERMIT ISSUED BY: Dwyane Buchanan
24B. DATE ISSUED: MONTH 12 DAY 21 YEAR 2021

CERTIFIER

ITEMS 25 THRU 33 COMPLETED BY CERTIFYING PHYSICIAN -- OR -- CORONER/CORONER'S PHYSICIAN OR MEDICAL EXAMINER

25A. CERTIFICATION: To the best of my knowledge, death occurred at the time, date and place and due to the causes stated.
Certifier's Name: Nashat Rabadi, MD
License No.: 188923
Signature: Nashat Rabadi, MD Electronically Signed
Month 12 Day 20 Year 2021
Certifier's Title: 0 ☒ Attending Physician 0 ☐ Physician acting on behalf of Attending Physician 1 ☐ Coroner 2 ☐ Medical Examiner / Deputy Medical Examiner
Address: 2157 Main St, Buffalo, NY 14214
25B. If coroner is not a physician, enter Coroner's Physician's name & title:
License No.:
Signature:
25C. If certifier is not attending physician, enter Attending Physician's name & title:
License No.:
Address:
26A. Attending physician attended deceased: FROM Month 12 Day 13 Year 2021 TO Month 12 Day 18 Year 2021
26B. Deceased last seen alive by attending physician: Month 12 Day 17 Year 2021
26C. Pronounced Dead ON Month 12 Day 18 Year 2021 AT Time 10:20 AM
27. MANNER OF DEATH: NATURAL CAUSE ☒ 1 ACCIDENT ☐ 2 HOMICIDE ☐ 3 SUICIDE ☐ 4 UNDETERMINED CIRCUMSTANCES ☐ 5 PENDING INVESTIGATION ☐ 6
28. WAS CASE REFERRED TO CORONER OR MEDICAL EXAMINER? 0 ☒ NO 1 ☐ YES
29A. AUTOPSY? NO ☒ 0 YES ☐ 1 REFUSED ☐ 2
29B. IF YES, WERE FINDINGS USED TO DETERMINE CAUSE OF DEATH? 0 ☐ NO 1 ☐ YES

CONFIDENTIAL — SEE INSTRUCTION SHEET FOR COMPLETING CAUSE OF DEATH — CONFIDENTIAL

CAUSE OF DEATH

30. DEATH WAS CAUSED BY: (ENTER ONLY ONE CAUSE PER LINE FOR (A), (B), AND (C).) — APPROXIMATE INTERVAL BETWEEN ONSET AND DEATH
PART I. IMMEDIATE CAUSE: (A) COVID 19 PNEUMONIA — DAYS
DUE TO OR AS A CONSEQUENCE OF: (B) HYPOXIC RESPIRATORY FAILURE — DAYS
DUE TO OR AS A CONSEQUENCE OF: (C) ACUTE RENAL FAILURE (D) HOSPITAL ACQUIRED PNEUMONIA — DAYS, (D) DAYS
PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO CAUSE GIVEN IN PART I (A): <<<>>>
DID TOBACCO USE CONTRIBUTE TO DEATH? 0 ☒ NO 1 ☐ YES 2 ☐ PROBABLY 3 ☐ UNKNOWN
31A. IF INJURY, DATE: MONTH DAY YEAR
HOUR:
31B. INJURY LOCALITY: (City or town and county and state)
31C. DESCRIBE HOW INJURY OCCURRED:
31D. PLACE OF INJURY:
31E. INJURY AT WORK? NO ☐ 0 YES ☐ 1
31F. IF TRANSPORTATION INJURY, SPECIFY: 1 ☐ Driver/Operator 2 ☐ Passenger 3 ☐ Pedestrian 4 ☐ OTHER (specify)
32. WAS DECEDENT HOSPITALIZED IN LAST 2 MONTHS? NO ☐ 0 YES ☐ 1
33A. IF FEMALE: 0 ☒ Not pregnant within last year 1 ☐ Pregnant at time of death 2 ☐ Not pregnant, but pregnant within 42 days of death 3 ☐ Not pregnant, but pregnant 43 days to 1 year before death 4 ☐ Unknown if pregnant within past year
33B. DATE OF DELIVERY: MONTH DAY YEAR

EXHIBIT 37

EXHIBIT 37

REGISTRAR'S DISTRICT 1401
REGISTER NUMBER 3747

NEW YORK STATE
DEPARTMENT OF HEALTH

CERTIFICATE OF DEATH

131-2021-00075592
STATE FILE NUMBER

DECEDENT

1. NAME: FIRST MIDDLE LAST: Dale R. Jones Sr.
2. SEX: MALE ☒ 1 FEMALE ☐ 2
3A. DATE OF DEATH: MONTH 09 DAY 02 YEAR 2021
3B. HOUR: 08:18 PM
4A. PLACE OF DEATH (Check one): HOSPITAL DOA ☐ HOSPITAL ER ☐ HOSPITAL OUTPATIENT ☐ HOSPITAL INPATIENT ☒ NURSING HOME ☐ PRIVATE RESIDENCE ☐ HOSPICE FACILITY ☐ OTHER (Specify) ☐
4B. IF FACILITY, DATE ADMITTED: MONTH 07 DAY 30 YEAR 2021
4C. NAME OF FACILITY: (If not facility, give address) Mercy Hospital
4D. LOCALITY: (Check one and specify) CITY ☐ VILLAGE ☐ TOWN ☐ Buffalo
4E. COUNTY OF DEATH: Erie
4F. MEDICAL RECORD NO.:
4G. WAS DECEDENT TRANSFERRED FROM ANOTHER INSTITUTION? (If yes, specify institution name, city or town, county and state) NO ☒ YES ☐
5. DATE OF BIRTH: MONTH 06 DAY 13 YEAR 1959
6A. AGE IN YEARS: 62 yrs.
6B. IF UNDER 1 YEAR ENTER: months days
6C. IF UNDER 1 DAY ENTER: hours minutes
7A. CITY AND STATE OF BIRTH: (If not USA, Country and Region/Province) Buffalo, New York
7B. IF AGE UNDER 1 YEAR, NAME OF HOSPITAL OF BIRTH:
8. SERVED IN U.S. ARMED FORCES? (Specify years) NO ☒ 0 YES ☐ 1
9. DECEDENT OF HISPANIC ORIGIN? Check the boxes that best describe whether the decedent is Spanish/Hispanic/Latino.
A ☒ No, not Spanish/Hispanic/Latino B ☐ Yes, Mexican, Mexican American, Chicano C ☐ Yes, Puerto Rican D ☐ Yes, Cuban E ☐ Yes, Other Spanish/Hispanic/Latino (Specify)
10. DECEDENT'S RACE: Check one or more races to indicate what the decedent considered himself or herself to be:
A ☒ White/Caucasian B ☐ Black or African American C ☐ Asian Indian D ☐ Chinese E ☐ Filipino F ☐ Japanese G ☐ Korean H ☐ Vietnamese J ☐ Native Hawaiian K ☐ Guamanian or Chamorro M ☐ Samoan N ☐ American Indian or Alaska Native (specify) P ☐ Other Asian (specify) R ☐ Other Pacific Islander (specify) S ☐ Other (specify)
11. DECEDENT'S EDUCATION: Check the box that best describes the highest degree or level of school completed at the time of death.
1 ☐ ≤ 8th grade 2 ☐ 9th-12th grade; no diploma 3 ☒ High school graduate or GED 4 ☐ Some college credit, but no degree 5 ☐ Associate's degree 6 ☐ Bachelor's degree 7 ☐ Master's degree 8 ☐ Doctorate/Professional degree
12. SOCIAL SECURITY NUMBER: [redacted]
13. MARITAL STATUS: NEVER MARRIED ☐ 1 MARRIED ☒ 2 WIDOWED ☐ 3 DIVORCED ☐ 4 SEPARATED ☐ 5
14. SURVIVING SPOUSE: Enter birth name of spouse if married or separated. Roxanne Landsman
15A. USUAL OCCUPATION: (Do not enter retired) Truck Driver
15B. KIND OF BUSINESS OR INDUSTRY: Fedex Freight
15C. NAME AND LOCALITY OF COMPANY OR FIRM: Tonawanda, NY
16A. RESIDENCE: (State or Country if not USA) NY
16B. County or Region/Province if not USA: Erie
16C. LOCALITY: (Check one and specify) CITY ☐ VILLAGE ☐ TOWN ☐ Cheektowaga Town
16D. STREET AND NUMBER OF RESIDENCE: 18 Edward Court
16E. ZIP CODE: 14225
16F. IF CITY OR VILLAGE, IS RESIDENCE WITHIN CITY OR VILLAGE LIMITS? ☐ YES ☐ NO IF NO, SPECIFY TOWN:

PARENTS

17. BIRTH NAME OF FATHER / PARENT: FIRST Martin MI R LAST Jones
18. BIRTH NAME OF MOTHER / PARENT: FIRST Janice MI H LAST Lyons

DISPOSITION

19A. NAME OF INFORMANT: Roxanne Jones
19B. MAILING ADDRESS: (Include zip code) 18 Edward Court, Cheektowaga Town, NY 14225
20A. 1 ☒ BURIAL 2 ☐ CREMATION 3 ☐ REMOVAL 4 ☐ HOLD 5 ☐ DONATION 6 ☐ ENTOMBMENT MONTH 09 DAY 08 YEAR 2021
20B. PLACE OF BURIAL, CREMATION, REMOVAL OR OTHER DISPOSITION: Mt. Calvary Cemetery
20C. LOCATION: (City or town and state) Cheektowaga Town, New York
21A. NAME AND ADDRESS OF FUNERAL HOME: Lombardo Funeral Home(Niagara Falls) 885 Niagara Falls Blvd, Amherst, NY 14226
21B. REGISTRATION NUMBER: 01056
22A. NAME OF FUNERAL DIRECTOR: Joseph P Lombardo
22B. SIGNATURE OF FUNERAL DIRECTOR: Joseph P Lombardo Electronically Signed
22C. REGISTRATION NUMBER: 12119
23A. SIGNATURE OF REGISTRAR: Tianna M Marks Electronically Signed
23B. DATE FILED: MONTH 09 DAY 03 YEAR 2021
24A. BURIAL OR REMOVAL PERMIT ISSUED BY: Dwyane Buchanan
24B. DATE ISSUED: MONTH 09 DAY 03 YEAR 2021

CERTIFIER

ITEMS 25 THRU 33 COMPLETED BY CERTIFYING PHYSICIAN -- OR -- CORONER/CORONER'S PHYSICIAN OR MEDICAL EXAMINER

25A. CERTIFICATION: To the best of my knowledge, death occurred at the time, date and place and due to the causes stated.
Certifier's Name: Alyssa Maria Ciccarella, NP
License No.: 345392
Signature: Alyssa Maria Ciccarella, NP Electronically Signed
Month 09 Day 02 Year 2021
Certifier's Title: 0 ☐ Attending Physician 0 ☐ Physician acting on behalf of Attending Physician 1 ☐ Coroner 2 ☐ Medical Examiner / Deputy Medical Examiner
Address: 565 Abbott Road, Buffalo, NY 14220
25B. If coroner is not a physician, enter Coroner's Physician's name & title:
License No.:
Signature:
25C. If certifier is not attending physician, enter Attending Physician's name & title:
License No.:
Address:
26A. Attending physician attended deceased: FROM 08/30/2021 TO 09/02/2021
26B. Deceased last seen alive by attending physician: 09/02/2021
26C. Pronounced Dead on 09/02/2021 at 08:18 PM
27. MANNER OF DEATH: NATURAL CAUSE ☒ 1 ACCIDENT ☐ 2 HOMICIDE ☐ 3 SUICIDE ☐ 4 UNDETERMINED CIRCUMSTANCES ☐ 5 PENDING INVESTIGATION ☐ 6
28. WAS CASE REFERRED TO CORONER OR MEDICAL EXAMINER? 0 ☐ NO 1 ☐ YES
29A. AUTOPSY? NO ☐ 0 YES ☐ 1 REFUSED ☐ 2
29B. IF YES, WERE FINDINGS USED TO DETERMINE CAUSE OF DEATH? 0 ☐ NO 1 ☐ YES

CONFIDENTIAL — SEE INSTRUCTION SHEET FOR COMPLETING CAUSE OF DEATH — CONFIDENTIAL

CAUSE OF DEATH

30. DEATH WAS CAUSED BY: (ENTER ONLY ONE CAUSE PER LINE FOR (A), (B), AND (C).) APPROXIMATE INTERVAL BETWEEN ONSET AND DEATH
PART I. IMMEDIATE CAUSE: (A) Cardiopulmonary Arrest — immediate
DUE TO OR AS A CONSEQUENCE OF: (B) Acute Respiratory Failure with Hypoxia — weeks
DUE TO OR AS A CONSEQUENCE OF: (C) Viral Pneumonia (D) COVID-19 — weeks, (D) weeks
PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO CAUSE GIVEN IN PART I (A): <<<>>>
DID TOBACCO USE CONTRIBUTE TO DEATH? 0 ☐ NO 1 ☐ YES 2 ☐ PROBABLY 3 ☒ UNKNOWN
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